



# CASA DE SUEÑOS EXCAVATIONS

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BUREAU OF  
LAND MANAGEMENT  
COLORADO

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1984

TECHNICAL REPORT



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BUREAU OF LAND MANAGEMENT  
Anasazi Heritage Center  
P. O. Box 758  
Dolores, Colorado 81323

JUL 31 1985

Dan Martin  
4806 McKinley Drive  
Boulder, Colorado 80303

Dear Dan:

Enclosed is a copy of CASA DE SUEÑOS EXCAVATIONS, the final report on 5MT3777 and 5MT3778, the two sites excavated in 1983-84 at the location of the new Anasazi Heritage Center, now under construction near Dolores, Colorado.

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EXCAVATIONS AT SITE 5MT3777 AND SITE 5MT3778, CASA DE SUEÑOS

Prepared by  
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Anasazi Heritage Center

For the  
Bureau of Land Management  
San Juan Resource Area  
Montrose District, Colorado

August 21, 1984  
Anasazi Heritage Center  
Dolores, Colorado

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# EXCAVATIONS OF SITES 5MT3777 AND 5MT3778, CASA DE SUEÑOS

## CHAPTER 1, INTRODUCTION

### Introduction

Two prehistoric sites, Site 5MT3777 and Site 5MT3778 (Casa de Sueños) lay under the location of the Anasazi Heritage Center (Figure 1), which was to be built near the Escalante Site (5MT2149) and the Domínguez Site (5MT2148). The Anasazi Heritage Center will be a museum, public information center, research center, and storage facility for artifacts from the Dolores Archaeological Program, and from other archeological investigations on Federal lands in southwestern Colorado.

The two sites are on lands owned and administered by the Bureau of Land Management in T37N, R15W, Section 7. Site 5MT3777 is a terrace/check dam that created a graden space on a steep hillside. Site 5MT3778 (Casa de Sueños) consists of a single surface room and associated kiva, and is about 10 m east of Site 5MT3777. Both sites are 2170 m (7120 ft) in elevation.

Because Sites 5MT3777 and 5MT3778 were to be destroyed and because they were on public land, Federal laws required mitigation of adverse impacts resulting from construction. In this case, mitigation of adverse impacts required complete excavation and documentation of which would record all possible information from the two sites.

Excavation was conducted under the authority of the National Historic Preservation Act of 1966, Section 106 (16 U.S.C. 470) and Executive Order 11593.

Casa de Sueños was located in April 1983, during a survey by Bureau of Land Management archeologist, Steve Fuller. Site 5MT3777 was located in August 1983, by David A. Breternitz and Ed Maloney during a reconnaissance of Casa de Sueños. Site forms were completed and submitted to the Colorado Preservation Office after excavations were completed. Excavations were conducted between September 12 and October 21, 1983. The permanent excavation crew consisted of three people, but up to seven people at a time were working on the two sites.

#### Previous Work

European exploration of the area began with the journey of Fray Silvestre Velez de Escalante and Fray Francisco Antonasio Dominguez, two Franciscans from the missions along the Rio Grande in New Mexico. They were searching for a direct route from Santa Fe, New Mexico, to Monterey, California, and were looking for new mission possibilities along the way. On August 12, 1776, they camped on the north side of the Dolores River near what is now Dolores, Colorado (Figure 2). Fr. Dominguez was ill, and the party remained in camp for an extra day to allow him to recover. Fr. Escalante spent the time exploring the southern part of the Dolores Rim, finding at least one ruin which reminded him of similar ruins in New Mexico (Chavez 1976:14).



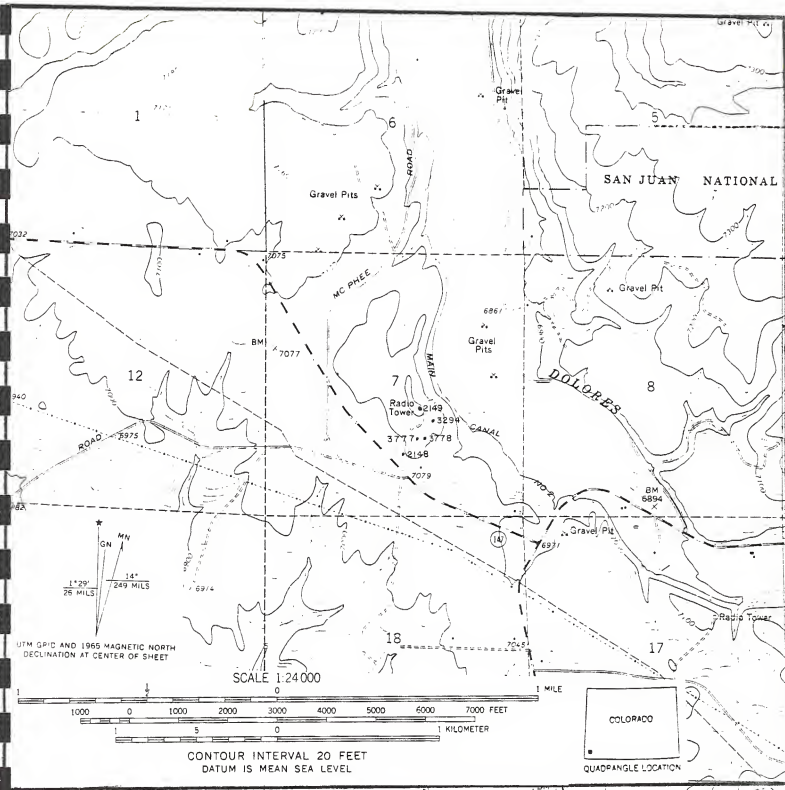


Figure 1: Location of Sites 5MT3777, 5MT3778 (Casa de Sueños), 5MT2148 (the Dominguez Site), 5MT2149 (the Escalante Site), and 5MT3294 (the Curator Site). From the USGS 7.5' Dolores west quadrangle, 1965.

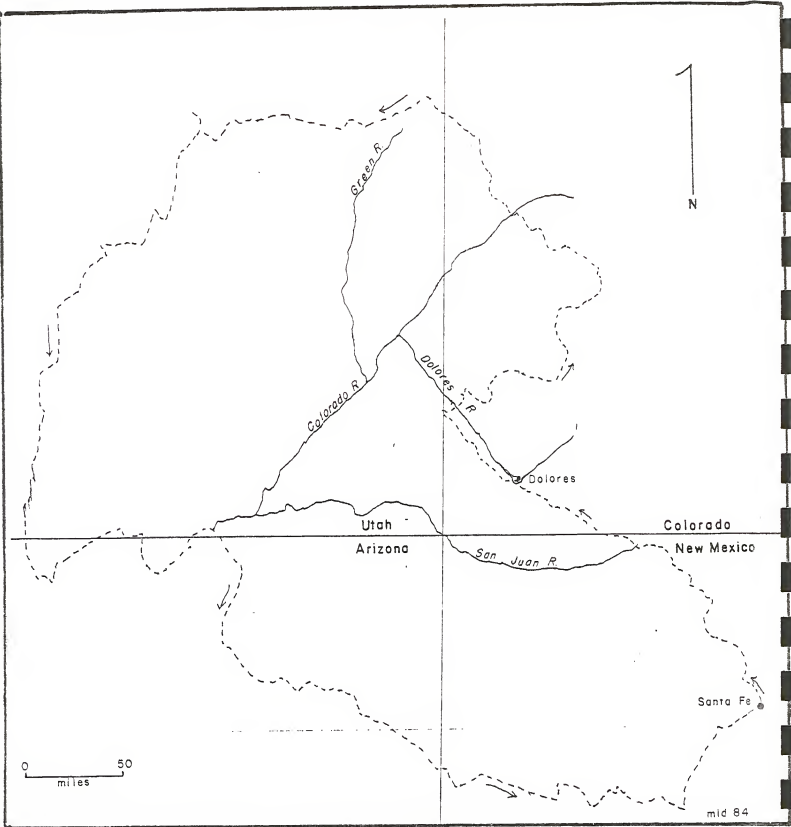


Figure 2: Dominguez-Escalante Trail, 1776-1777. From Chavez (1976:121).

Site 5MT2149 was later named in honor of Fr. Escalante, although it may not be the actual site he visited. Site 5MT2148 was named in honor of Fr. Dominguez, the leader of the expedition. In 1919, J. Walter Fewkes identified site 5MT2149 as the one visited by Fr. Escalante (Fewkes 1919:36). In 1970, the University of Colorado recorded the sites in a survey for the Bureau of Land Management (BLM site files).

In 1975 and 1976 the Escalante and Dominguez sites were excavated and stabilized as part of the Bureau of Land Management's Bicentennial celebration (Hallisi 1979; Reed 1979; White and Breternitz 1979). Both sites are open to the public with an interpretive display and brochure, and both sites will be incorporated into the interpretive functions of the Anasazi Heritage Center.

The Bureau of Land Management has surveyed the hill on which the Escalante and Dominguez sites lie and recorded four more sites, 5MT3294 (Curator Site), a pueblo-tower-kiva unit; 5MT4384, an isolated tower; 5MT3777, and 5MT3778. The latter two sites are the focus of this report.

In the immediate vicinity there have been three other major surveys. The Dolores Archaeological Program investigated the area from 1972 to 1983 (Breternitz and Martin 1973; Toll 1974; Kane 1975a, 1975b, 1977; Toll 1977; Orcutt and Goulding 1983; Goulding and Orcutt 1983). Fetterman and Honeycutt (1980) surveyed the area south of the Escalante Site for the MAPCO pipeline. Doug Scott conducted a survey

for the Bureau of Land Management to the south in 1978 (BLM site files). There are 227 prehistoric sites recorded in the surrounding area of 9 square miles (Figure 3). These sites will be discussed in Chapter 4.

#### Environment

Sites 5MT3777 and 5MT3778 are located on a hillside just south of the Dolores River. The Dolores River originates in the San Miguel Mountains and flows southwesterly until a point just past the town of Dolores, Colorado, where it turns to flow northwesterly to its junction with the Colorado River in Eastern Utah (Figure 4). The area where the sites are located, however, is drained by Hartman Draw which flows into McElmo Creek, which in turn flows into a tributary of the Colorado River (Figure 4).

Nevertheless, the Dolores River affects the hillside on which the sites are located. In this area of the river's course, the valley is broad, about 500 m wide, with a floodplain of Quaternary alluvium. Just beyond the newly built McPhee Dam and Reservoir (Figure 4), the river enters a deep canyon with steep or sheer walls. The Anasazi used the area around the site, and areas where the river floodplain is relatively broad, as a location for fields and habitations. Once the canyon narrows and deepens, Anasazi occupation and use is limited, as is that of other prehistoric peoples (Toll 1977).

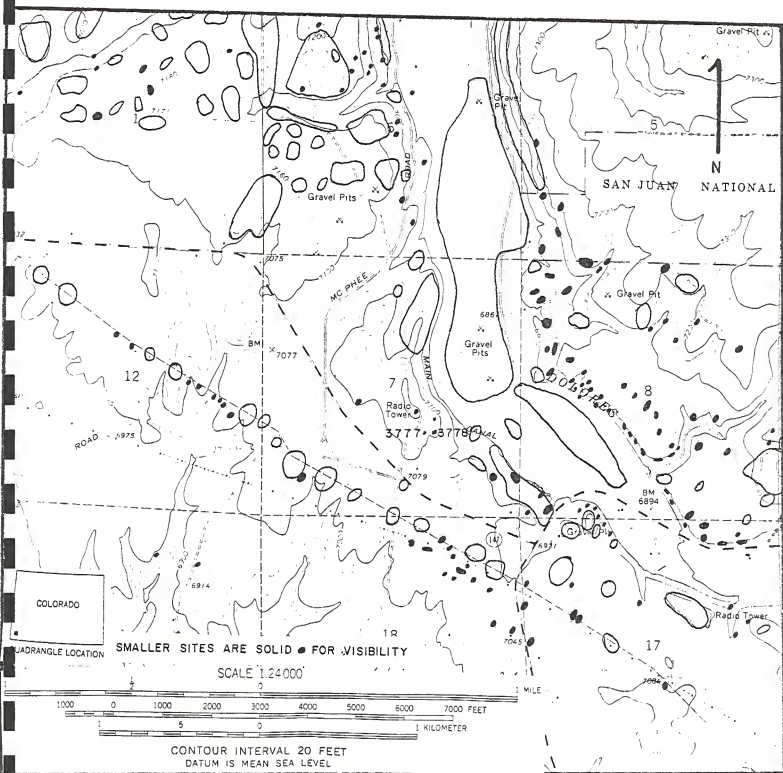


Figure 3: Prehistoric sites in the area around Sites 5MT3777 and 5MT3778. The entire area has not been intensively surveyed. From the USGS Dolores West 7.5' quadrangle, 1965.

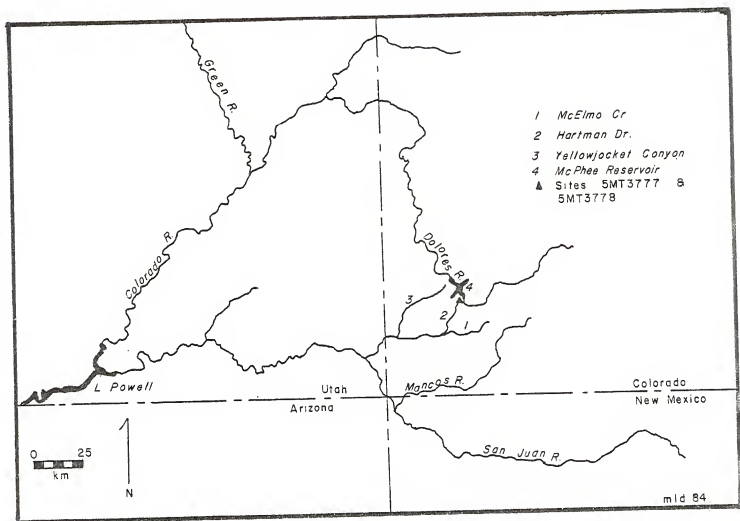


Figure 4: Drainage patterns around sites 5MT3777 and 5MT3778.

#### GEOLOGY

The hill upon which sites 5MT3777 and 5MT3778 are located is composed of sandstone and shale. The sandstone is of the Dakota and Burro Canyon formations, which are the predominant strata in the vicinity. They are Lower Cretaceous, yellowish brown to gray sandstones in beds 30 m thick in the area (Haynes et al 1972).

Above the Dakota and Burro Canyon formations is the Mancos Shale, a Cretaceous gray shale that may be 60 to 90 m thick in parts of Montezuma County (Haynes et al 1972). Mancos Shale is highly fossiliferous and very fragmented when it outcrops; it is, thus, unstable when disturbed and tends to slide downhill. The Dominguez Site, Site 5MT3777, and Casa de Suenos are all on Mancos Shale.

The soils on the hillside are shallow, warm, and well-drained Camborthids-Torriorthents-Haplargids (CSU 1972). These soils occur on steep hillsides, benches, and canyons. South of the hill in the Hartman Draw drainage area the mesas are covered with deep Quaternary eolian deposits of reddish-brown loess (CSU 1972). This soil is a Haplargid, well-drained, and highly suitable for agriculture. The drainages in the area south of the Dolores Rim are in canyons exposing the Morrison Formation, an Upper Jurassic mudstone with green and red sandstones (Haynes et al 1972).

#### FLORA

The hillside is covered with a pinon-juniper-oak forest (Bye 1984:13; Benz 1984:76). Some of the associated species are listed in Table 1. Species of plants found on nearby disturbed land are also listed in Table 1. Because there may have been past changes in the climate, and thus, in the vegetation, Table 2 shows the flora recovered from sites in the Dolores Archaeological Program area from the time period A.D. 980 to A.D. 1250, the period during which sites 5MT3777 and 5MT3778 were occupied. Many of these plants were economically useful to prehistoric peoples (Table 3). Table 4 displays the seasonality of some of the important plant species.

Table 1. Flora on hillside (page 1 of 3)

Vegetation type: Pinyon-juniper-oak woodland

Trees

Cupressaceae  
    Juniperus osteosperma  
    Juniperus scopulorum  
Fagaceae  
    Quercus gambelii  
Pinaceae  
    Pinus edulis

Shrubs

Anacardiaceae  
    Rhus aromatica  
Berberidaceae  
    Mahonia repens  
Compositae  
    Artemisia tridentata  
    Chrysothamnus nauseosus  
Grossulariaceae  
    Ribes sp.  
Hydrangeaceae  
    Fendlera rupricola  
Rosaceae  
    Amelanchier utahensis  
    Cercocarpus montanus  
    Peraphyllum ramosissimum

Herbs

Alliaceae  
    Allium sp.  
    Allium acuminatum  
Boraginaceae  
    Cryptantha sp.  
    Lappula sp.  
    Lappula redowskii  
Cactaceae  
    Opuntia sp.  
    Coryphantha sp.  
Chenopodiaceae  
    Chenopodium sp.  
Compositae  
    Archillea millefolium  
    Aster sp.



Table 1. Flora on hillside (page 2 of 3)

	<u>Carduus nutans</u>
	<u>Chysopsis</u> sp.
	<u>Erigeron</u> sp.
	<u>Erigeron speciosus</u>
	<u>Heterotheca villosa</u>
	<u>Machaeranthera pinnatifida</u>
	<u>Xanthocephalum sarothrae</u>
Cruciferae	
	<u>Hedysarum boreale</u>
	<u>Physaria</u> sp.
	<u>Sisymbrium altissimum</u>
Leguminosae	
	<u>Lupinus</u> sp.
	<u>Trifolium</u> sp.
	<u>Vicia</u> sp.
Liliaceae	
	<u>Calochortus</u> sp.
	<u>Yucca baccata</u>
Malvaceae	
	<u>Sphaeralcea coccinea</u>
Polemoniaceae	
	<u>Ipomopsis</u> sp.
	<u>Phlox</u> sp.
Polygonaceae	
	<u>Eriogonum lonchophyllum</u>
	<u>Eriogonum umbellatum</u>
Scrophulariaceae	
	<u>Castilleja</u> sp.
	<u>Orthocarpus</u> sp.
	<u>Penstemon</u> sp.
	<u>Penstemon barbatus</u>
	<u>Penstemon bridgesii</u>
<u>Grasses and grasslike plants</u>	
Cyperaceae	
	<u>Scirpus</u> sp.
Gramineae	
	<u>Bromus</u> sp.
	<u>Elymus cinereus</u>
	<u>Oryzopsis hymenoides</u>
	<u>Stipa</u> sp.

Table 1. Flora on hillside (page 3 of 3)

Vegetation types: On disturbed/cultivated lands

Trees

Cupressaceae

Juniperus osteosperma

Pinaceae

Picea sp.

Pinus sp.

Shrubs

Anacardiaceae

Rhus aromatica

Grossulariaceae

Ribes sp.

Herbs

Compositae

Grindelia squarrosa

Lactuca sp.

Heterotheca villosa

Convolvulaceae

Convolvulus arvensis

Cruciferae

Chorispura tenella

Sisymbrium altissimum

Leguminosae

Medicago sp.

Melilotus sp.

From Benz 1984:60-64.

Table 2. Identified plant taxa from the Dolores  
Archaeological Program area A.D. 980-1250 (page 1 of 2)

Taxon

Boraginaceae

Lappula redowskii

Cactaceae

Opuntia

Opuntia fragilis

Chenopodiaceae

Chenopodium

Salsola

"Cheno-am"

Compositae

Artemisia

Artemisia tridentata

Bidens

Helianthus

Cruciferae

Cyperoaceae

Gramineae

Zea mays

Liliaceae

Yucca

Malvaceae

Pinaceae

Pinus

Pinus edulis

Pinus ponderosa

Polygonaceae

Polygonum

Rosaceae

Amelanchier

Cercocarpus montanus

NOTE: "Cheno-am" - Chenopodium-Amaranthus, indistinguishable.

Table 2. Identified plant taxa from the Dolores  
Archaeological Program area A.D. 980-1250 (page 2 of 2)

Salicaceae

Populus

Solanaceae

Nicotiana attenuata

Physalis

Solanum

Gymnospermae

Juniperus

J. osteosperma

J. scopulorum

Dicotyledoneae

Amaranthus

Fedlera rupicola

Portulaca

Quercus gambelii

Verbena

From Matthews 1984:102-105.

Table 3. Potential uses of plants recovered from area sites (page 1 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Amaranthus</u> sp. (pigweed)				
flower				Pink dye
leaf	Boiled			
seed	Meal			
	Ground with corn			
	Atole			
<u>Amelanchier</u> sp. (serviceberry)				
fruit	Raw, dried			
wood				Bows & arrows
<u>Artemisia</u> sp. (sagebrush)				
leaf			Indigestion, headache, fever	
wood		Fuel, wall construction		
<u>Cercocarpus montanus</u> (true mountain mahogany)				
root				Dye
wood		Sweathouse	Prayerstick	Weaving tools, arrows

Table 3. Potential uses of plants recovered from area sites (page 2 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Chenopodium</u> sp.				
(goosefoot)				
leaf	Greens		Stomachache, intestinal worms	
seed	Raw, ground			
<u>Chrysothamnus</u> sp.				
(rabbitbrush)				
flower				Dye
NR	With corn mush			
wood	Kiva fuel			
<u>Cleome</u> sp.				
(beeweed)				
leaf	Greens			Pottery paint
NR				
<u>Datura</u> sp.				
(sacred datura)				
leaf			Medicinal	
NR			Induces visions	
root			Medicinal	
seed			For ceremonies	
<u>Descurainia</u> sp.				
(mustard)				
leaf	Greens			Pottery paint
WP				

Table 3. Potential uses of plants recovered from area sites (page 3 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Helianthus</u> sp. (sunflower)				
petal			Face powder for basket dance	
root			Cure rattlesnake bite	
seed	Raw			Textile dye
<u>Juniperus</u> sp. (juniper)				
ash				Corn soak
fruit	Raw, cooked			
leaf			Taxative, childbirth, bruises, sprains	
seed				Beads, rattles
wood		Fuel, posts		
<u>Lactuca</u> sp. (wild lettuce)				
root				Chewing gum
<u>Mentzelia albicaulis</u> (stick-leaf)				
NR			Toothache	Tobacco substitute
seed	Meal			
<u>Nicotiana attenuata</u> (wild tobacco)				
leaf				Smoked

Table 3. Potential uses of plants recovered from area sites (page 4 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Opuntia</u> sp.				
(pricklypear)				
bud	Cooked			
fruit	Raw, cooked			
pad	Cooked, roasted			
stem	Cooked			
<u>Oryzopsis hymenoides</u>				
(Indian ricegrass)				
seed	Ground			
<u>Phragmites</u> sp.				
(reed)				
stem		Roofing, mats, thatch	Prayer stick	Pipe stems, arrow shafts, game sticks
<u>Physalis</u> sp.				
(groundcherry)				
fruit	Raw, cooked			
<u>Pinus edulis</u>				
(pinyon pine)				
gum			On sores	Waterproofing
needles			Syphilis	
nuts	Raw, roasted			
wood		Fuel, construction		



Table 3. Potential uses of plants recovered from area sites (page 5 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Pinus ponderosa</u> (ponderosa pine) needle wood		Roofing, kiva ladders	On paho	
<u>Populus sp.</u> (cottonwood) catkin wood		Construction	Ceremonial objects, pahos, snake dance	Gum Fire spindles, drums
<u>Portulaca sp.</u> (purslane) leaf/stem NR seed	Greens Gravy, "food" Ground, mush, bread			
<u>Quercus gambelii</u> (Gambel oak) bark gall nut  wood	Food Boiled, roasted ground		Heart ailment	Rabbit sticks, digging sticks, clubs, bows, arrows

Table 3. Potential uses of plants recovered from area sites (page 6 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Ribes sp.</u> (currant) fruit wood	Raw			Arrows
<u>Rhus aromatica</u> (squawbush) fruit  root wood	Beverage, raw, meal	Kiva fuel	Treat consumption Prayer sticks, wands	Body paint, dye  Basketry, cradles
<u>Salix sp.</u> (willow) ash wood		Roofing	Pahos, wands, paraphernalia	Body paint
<u>Sarcobatus</u> <u>vermiculatus</u> (greasewood) wood		Fuel, construction, kiva fuel	Musical instruments	Bows, arrows, snares, rabbit sticks, digging sticks

Table 3. Potential uses of plants recovered from area sites (page 7 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Scirpus</u> sp.				
(bulrush)				
root	Raw, boiled			
shoot	Raw, boiled			
stem			Tonic	
WP			Symbolizes water	
<u>Solanum</u> sp.				
(nightshade)				
fruit	Condiment			
root			Toothache	
tuber	Boiled, eaten with clay			
<u>Sphaeralcea</u> sp.				
(mallow)				
root			For sword swallower Broken bones, constipation	
<u>Verbena</u>				
(verbena)				
NR			White medicine	

Table 3. Potential uses of plants recovered from area sites (page 8 of 8)

Taxon	Category of use			
	Food	Construction/fuel	Medicinal/ceremonial	Other
<u>Yucca</u> sp.				
(yucca)				
flower	Baked, fried			
fruit	Boiled, baked			
leaf			On masks	Cordage, basketry, brushes
root				Soap

From Matthews 1984:114-120

Table 4. Season of availability for plants recovered from area sites (page 1 of 2)

	Early spring	Late spring	Early summer	Late summer	Fall	Winter	Year- round	Cycle
<u>Amaranthus</u> sp.	+++++	greens-----		-----seeds-----				A
<u>Amelanchier</u> sp.				-----fruit---			wood	P
<u>Artemisia</u> sp.				-----leaves-----	+++++		wood	P
<u>Atriplex</u> sp.	++seeds				-----seeds-----		wood	P
<u>Celtis</u> sp.					-fruit-		wood	P
<u>Cercocarpus</u> sp.							wood	P
<u>Chenopodium</u> sp.	+++++	greens-----		-----seeds-----				A
<u>Chrysothamnus</u> sp.				-----flower-----			wood	P
					-----seeds+++			
<u>Cleome</u> sp.	+++++	greens-----		+++-----seeds-----				A
<u>Cornus</u> sp.				+++-----seeds-----			wood	P
<u>Datura</u> sp.				-----leaves-----			root	A/P
				-----fruit-----				
				-----seeds---				
<u>Descurania</u> sp.		-----greens-----						A
	+++++	-----seeds-----						
<u>Helianthus</u> sp.				+++-----petals---				A
				-----seeds---				
<u>Juniperus</u> sp.	++fruit			+++-----fruit-----	+++		wood	P
<u>Lactuca</u> sp.								A/B
<u>Mahonia repens</u> sp.	+++	-----leaves-----					root	P
		-----fruit---						
<u>Mentzelia albicoulis</u>	+++	-----seeds-----						A
<u>Nicotiana attenuata</u>	+++	-----leaves-----						A
<u>Opuntia</u> sp.	-flower buds-			-----fruit-----				P
		-----pads and joints-----						

Table 4. Season of availability for plants recovered from area sites (page 2 of 2)

	Early spring	Late spring	Early summer	Late summer	Fall	Winter	Year- round	Cycle
<u>Oryzopsis hymenoides</u>			--seeds-----					A
<u>Phragmites</u> sp.			+++-----	stem-----				P
<u>Physalis</u> sp.			-----fruit-----					A/P
<u>Pinus edulis</u>					---nut+++++		wood	P
<u>P. ponderosa</u> sp.							wood	P
<u>Populus</u> sp.							wood	P
<u>Portulaca</u> sp.			+++++-----	greens-----				A
			+++++-----	seeds-----				
<u>Pseudotsuga</u> sp.							wood	P
<u>Quercus</u> sp.				-----nut-----			wood	P
<u>Ribes</u> sp.				-----fruit--			wood	P
<u>Rhus aromatica</u>				----fruit---			wood	P
<u>Salix</u> sp.							wood	P
<u>Sarcobatus vermiculatus</u>							wood	P
<u>Scirpus</u> sp.			--shoot---		-seed--		rootstock	P
<u>Solanum</u> sp.					-fruit/tuber			A/P
<u>Sphaeralcea</u> sp.							rootstock	P
<u>Typha</u> sp.					-----shoot-----			P
				bloom				
				--pollen--				
				-----root-----				
<u>Yucca</u> sp.			-----flower---		-fruit-		root	P

NOTES: Dashed lines indicate season(s) plant part is available under optimum conditions.

A - Annual.

B - Biennial.

P - Perennial.

+ - Availability dependent on local conditions.

From Matthews 1984: 122-125.

## FAUNA

The area has a number of microenvironments supporting a diverse fauna. Table 5 lists some of the species observed in the area. There are several rodent species, and while these were used as food by prehistoric peoples, the occurrence of such bones in an archeological context may also represent intrusion by modern specimens burrowing into the site. Some animals on the list, i.e., pika, marten, spotted skunk, ringtail, pygmy owl, and spotted squirrel, are rare or unknown in southwestern Colorado today (Emslie 1982:20), and may show a possible climate shift.

## CLIMATE

The climate of the area is characterized as cold, semiarid, mid-latitude (Trewartha 1954:225). Climate is essential in determining what crops can be grown and with what success; for the Anasazi, climate was one essential in determining the pattern of settlement for a particular locale. For example, corn, the main Anasazi crop, requires 260 to 450 g of water to produce each gram of dry matter (Jenkins 1941:312). It also requires plentiful moisture throughout the growing season. Southwest Colorado receives less rain than the major corn growing states (Petersen 1981:152), but the variety of corn grown by the Anasazi was apparently able to offset the lack of rain. Collins (1914) records that Hopi corn is planted deeply (45 cm) to take advantage of deep ground moisture until the summer monsoon rains fall. Presumably, Anasazi corn was similar to some modern races used in nonintensive agriculture (Shuster 1981). Failure of the summer

Table 5. A partial list of faunal species observed and reported to be found in southwestern Colorado (page 1 of 4)

Scientific name	Common name
Mammalia:	
<u>Sorex cinereus</u>	Masked shrew
<u>Sorex vagrans</u>	Wandering shrew
<u>Sorex nanus</u>	Dwarf shrew
<u>Sorex palustris</u>	Water shrew
<u>Sorex merriami</u>	Merriam's shrew
<u>Notiosorex crawfordi</u>	Desert shrew
<u>Myotis lucifugus</u>	Little brown bat
<u>Myotis yumanensis</u>	Yuma myotis
<u>Myotis evotis</u>	Long-eared myotis
<u>Myotis thysanodes</u>	Fringed myotis
<u>Myotis californicus</u>	California myotis
<u>Myotis leibii</u>	Small-footed myotis
<u>Myotis volans</u>	Long-legged myotis
<u>Lasionycteris noctivagans</u>	Silver-haired bat
<u>Pipistrellus hesperus</u>	Western pipistrelle
<u>Eptesicus fuscus</u>	Big brown bat
<u>Lasiurus cinereus</u>	Hoary bat
<u>Plecotus townsendii</u>	Big-eared bat
<u>Antrozous pallidus</u>	Pallid bat
<u>Tadarida brasiliensis</u>	Brazilian free-tailed bat
<u>Ochotona princeps</u>	Fika
<u>Sylvilagus nuttallii</u>	Nuttall's cottontail
<u>Sylvilagus auduboni</u>	Desert cottontail
<u>Lepus americanus</u>	Snowshoe hare
<u>Lepus townsendii</u>	White-tailed jackrabbit
<u>Lepus californicus</u>	Black-tailed jackrabbit
<u>Eutamias minimus</u>	Least chipmunk
<u>Eutamias quadrivittatus</u>	Colorado chipmunk
<u>Marmota flaviventris</u>	Yellow-bellied marmot
<u>Amnospermophilus leucurus</u>	White-tailed antelope squirrel
<u>Spermophilus spilosoma</u>	Spotted ground squirrel
<u>Spermophilus lateralis</u>	Golden-mantled ground squirrel
<u>Spermophilus variegatus</u>	Rock squirrel
<u>Cynomys gunnisoni</u>	Gunnison's prairie dog
<u>Sciurus aberti</u>	Abert's squirrel
<u>Tamiasciurus hudsonicus</u>	Chickaree
<u>Thomomys bottae</u>	Valley pocket gopher
<u>Thomomys talpoides</u>	Northern pocket gopher
<u>Perognathus flavus</u>	Silky pocket mouse
<u>Perognathus apache</u>	Apache pocket mouse
<u>Dipodomys ordii</u>	Ord's kangaroo rat
<u>Castor canadensis</u>	Beaver
<u>Reithrodontomys megalotis</u>	Western harvest mouse
<u>Peromyscus maniculatus</u>	Deer mouse



Table 5. A partial list of faunal species observed and reported to be found in southwestern Colorado (page 2 of 4)

Scientific name	Common name
Mammalia (continued):	
<u>Peromyscus boylii</u>	Brush mouse
<u>Peromyscus truei</u>	Pinyon mouse
<u>Peromyscus difficilis</u>	Rock mouse
<u>Peromyscus crinitus</u>	Canyon mouse
<u>Onychomys leucogaster</u>	Northern grasshopper mouse
<u>Neotoma cinerea</u>	Bushy-tailed wood rat
<u>Neotoma mexicana</u>	Mexican wood rat
<u>Neotoma albigula</u>	White-throated wood rat
<u>Microtus montanus</u>	Montane vole
<u>Microtus longicaudus</u>	Long-tailed vole
<u>Microtus mexicanus</u>	Mexican vole
<u>Clethrionomys gapperi</u>	Red-backed vole
<u>Phenacomys intermedius</u>	Heather vole
<u>Ondatra zibethicus</u>	Muskrat
<u>Zapus princeps</u>	Western jumping mouse
<u>Erethizon dorsatum</u>	Porcupine
<u>Mus musculus</u>	House mouse (introduced)
<u>Canis latrans</u>	Coyote
<u>Canis lupus</u>	Gray wolf
<u>Vulpes vulpes</u>	Red fox
<u>Vulpes macrotis</u>	Kit fox
<u>Urocyon cinereoargenteus</u>	Gray fox
<u>Ursus americanus</u>	Black bear
<u>Ursus arctos</u>	Grizzly bear
<u>Bassariscus astutus</u>	Ringtail
<u>Procyon lotor</u>	Raccoon
<u>Martes americana</u>	Marten
<u>Mustela erminea</u>	Ermine
<u>Mustela vison</u>	Mink
<u>Mustela nigripes</u>	Black-footed ferret
<u>Mustela frenata</u>	Long-tailed weasel
<u>Gulo gulo</u>	Wolverine
<u>Taxidea taxus</u>	Badger
<u>Spilogale putorius</u>	Spotted skunk
<u>Mephitis mephitis</u>	Striped skunk
<u>Lutra canadensis</u>	River otter
<u>Lynx rufus</u>	Bobcat
<u>Lynx canadensis</u>	Lynx
<u>Felix concolor</u>	Mountain lion
<u>Cervus elaphus</u>	American elk
<u>Odocoileus hemionus</u>	Mule deer
<u>Antilocapra americana</u>	Pronghorn
<u>Ovis canadensis</u>	Bighorn

Table 5. A partial list of faunal species observed and reported to be found in southwestern Colorado (page 3 of 4)

Scientific name	Common name
Aves:	
<u>Ardea herodias</u>	Great blue heron
<u>Nycticorax nycticorax</u>	Black-crowned night heron
<u>Branta canadensis</u>	Canada goose
<u>Anas platyrhynchos</u>	Mallard
<u>Anas crecca carolinensis</u>	American green-winged teal
<u>Anas discors</u>	Blue-winged teal
<u>Anas cyanoptera</u>	Cinnamon teal
<u>Anas americana</u>	American wigeon
<u>Oxyura jamaicensis</u>	Ruddy duck
<u>Mergus merganser</u>	Common merganser
<u>Cathartes aura</u>	Turkey vulture
<u>Accipiter gentilis</u>	Goshawk
<u>Accipiter striatus</u>	Sharp-shinned hawk
<u>Accipiter cooperii</u>	Cooper's hawk
<u>Buteo jamaicensis</u>	Red-tailed hawk
<u>Buteo lagopus</u>	Rough-legged hawk
<u>Aquila chrysaetos</u>	Golden eagle
<u>Haliaeetus leucocephalus</u>	Bald eagle
<u>Circus cyaneus</u>	Marsh hawk
<u>Falco mexicanus</u>	Prairie falcon
<u>Falco peregrinus</u>	Peregrine falcon
<u>Falco columbarius</u>	Merlin
<u>Falco sparverius</u>	American kestrel
<u>Centrocercus urophasianus</u>	Sage grouse
<u>Denagapus obscurus</u>	Blue grouse
<u>Pedioecetes phasianellus</u>	Sharp-tailed grouse
<u>Lophortyx gambelii</u>	Gambel's quail
<u>Meleagris gallopavo</u>	Turkey
<u>Porzana carolina</u>	Sora
<u>Fulica americana</u>	American coot
<u>Charadrius vociferus</u>	Killdeer
<u>Capella gallinago</u>	Common snipe
<u>Actitis macularia</u>	Spotted sandpiper
<u>Recurvirostra americana</u>	American avocet
<u>Zenaida macroura</u>	Mourning dove
<u>Columba fasciata</u>	Band-tailed pigeon
<u>Tyto alba</u>	Barn owl
<u>Otus asio</u>	Screech owl
<u>Bubo virginianus</u>	Great-horned owl
<u>Glaucidium gnoma</u>	Pygmy owl
<u>Aegolius acadicus</u>	Saw-whet owl

Table 5. A partial list of faunal species observed and reported to be found in southwestern Colorado (page 4 of 4)

Scientific name	Common name
Aves (continued):	
<u>Athene cunicularia</u>	Burrowing owl
<u>Phalaenoptilus nuttallii</u>	Poor-will
<u>Chordeilus minor</u>	Common nighthawk
<u>Aeronautes saxatalis</u>	White-throated swift
Reptilia:	
<u>Sceloporus graciosus graciosus</u>	Northern sagebrush lizard
<u>Urosaurus ornatus wrighti</u>	Northern tree lizard
<u>Phrynosoma douglassi</u>	Short-horned lizard
<u>Eumeces spp.</u>	Skink
<u>Cnemidophorus velox</u>	Plateau whiptail
<u>Pituophis melanoleucus deserticola</u>	Great Basin garter snake
<u>Thamnophis elegans vagrans</u>	Wandering garter snake
<u>Crotalus viridis concolor</u>	Midget faded rattlesnake
Amphibia:	
<u>Ambystoma tigrinum</u>	Tiger salamander
<u>Bufo woodhousei woodhousei</u>	Woodhouse's toad
<u>Bufo punctatus</u>	Red-spotted toad

From Neusius 1984: 148-154.

rains, however, could mean crop failure unless irrigation or some other water control system were used (Petersen 1981:152; Shuster 1981:123-124). However, the area is marginal for dry-land agriculture, even with the Anasazi water control systems of check dams and reservoirs. The loss of 2.5 cm of rain a year at the wrong time could also mean crop failure (Martin and Plog 1973).

Corn also requires over 100 frost-free days to reach maturity (Hack 1942:20). Because such data are not present from Dolores, the weather information from Yellowjacket, about 15 km west of the sites, is used. Yellowjacket has an average of 126 frost-free days, with a range of from 100 to 145 days (Table 6). A growing season of 100 days could mean crop failure (Kane 1983b:65). The growing season on or near the site averages around 126 days, sufficient for the main crop, corn, as well as others such as beans and squash. An especially late or early frost could also spell disaster. The Anasazi probably maximized their agriculture by planting in a variety of places, such as the modern Hopi (Collins 1914; Martin and Plog 1973), by their community and settlement patterns, and by other social adaptations. The soils on the hillside are unsuited for agriculture (Leonhardy and Clay 1984b:256,258), but within 500 m south are large areas of red loess soils suitable for growing maize, beans, squash, and other crops (Leonhardy and Clay 1984b:256,258,295-6).

#### OTHER RESOURCES

The Anasazi utilized other resources from the area. Lithic materials for the manufacture of chipped stone tools are primarily

Table 6. Climate data from the vicinity of 5MT3777 and 5MT3778

Station	Elevation (m)	Latitude	Annual precip. (mm)	July mean temp. (°C)	Jan. mean temp. (°C)	Consecutive frost-free days (mean)	Frost-free days, standard deviation
Dolores <sup>1/</sup>	2118	37°28'N	460.5	19.7*	-3.1*	**	**
Yellowjacket <sup>2/</sup>	2090	37°33'N	376.4	21.2	-4.2	124	17.92
Cortez <sup>3/</sup>	1882	37°21'N	308.9	22.2	-2.8	128	12.42
Hovenweep <sup>4/</sup>	1646	37°23'N	288.8	24.6	-3.7	147	17.42

Source: U.S. Department of Commerce National Weather Service Climatological Substation Summaries, 1964-1975.

\*For period 1908-1928.

\*\*Not available.

<sup>1/</sup>The Dolores station is located 6.4 km southwest of the locality.

<sup>2/</sup>The Yellowjacket station is located 13.7 km west of the locality.

<sup>3/</sup>The Cortez station is located 17.8 km south of the locality.

<sup>4/</sup>The Hovenweep station is located 47.7 km southwest of the locality.

From Kane 1983:64.

from the Morrison Formation and Burro Canyon Formation; these are generally available within a few kilometers of both sites (Phagan and Maloney 1981). Stone for manufacturing ground stone tools is primarily from the well-cemented tabular Dakota sandstones; these are available locally as well (Phagan and Maloney 1981).

Clay for the manufacture of ceramics is found in the general area of the site, particularly in the Dolores River valley. The Summerville, Junction Creek, Morrison, Burro Canyon, Dakota, and Mancos formations all contain clay deposits (Wilson and Clay n.d.). Tests on clays by the Dolores Archaeological Program ceramics analysts and geologists show a preference among prehistoric potters for clays from the Mancos formation, followed by the Morrison and Burro Canyon formations (Wilson and Clay n.d.).

Wood for building and for fuel is available on the hillside in the form of oak, juniper and pinon, and across the valley in higher elevations in the form of ponderosa. Juniper and pinon were both identified in the plant remains of Site 5MT3778 (Chapter 3). Both are also present in the Escalante Site, along with poplar and ponderosa (Hallisi 1979:393; Gleichman 1977:419).

Building stone for Site 5MT3778 is available on the hillside where Dakota Sandstone outcrops. Dakota Sandstone is often found in tabular forms, highly suitable for use as building stone (Leonhardy and Clay 1984a:143), and it is the most common construction material found in Site 5MT3778. River cobbles from the Dolores River valley and from gravel deposits on the hillside were also used in the construction of

Site 5MT3778. Both Dakota Sandstone and river cobbles were used in the construction of Site 5MT3777.

Potable water is available from the Dolores River, 100 m north and 30 m downhill. Water from springs might have been available on the canyon walls and in the head of Hartman Draw, but this is undocumented. At any rate, getting potable water to the sites would have required carrying it some distance.

#### Summary and Conclusions

Sites 5MT3777 and 5MT3778 are located in an ecotone of upland and riparian environments, with immediately exploitable plant and animal resources, as well as other resources, such as stone and clay. Land suitable for planting crops is adjacent to the south. In addition, the Dolores River valley to the north has many of the above-mentioned resources as well as a riparian environment and resources.

CHAPTER 2  
EXCAVATIONS AT SITE 5MT3777

Introduction

Site 5MT3777 was located during a reconnaissance in September 1983. It is approximately 10 m west of Site 5MT3778, Casa de Suenos (Figure 1). It is located at UTM zone 12, 717200 mE, 4150450 mN. From the surface examination of the site, it initially appeared to be a badly eroded small structure of three or four rooms (Figure 5). One row of rocks was visible and was thought to be the back wall of the room block.

As the site was being recorded, a complete surface collection of ceramics, flaked lithics, and nonflaked lithics was made. An area of 10 m by 16 m, based on artifact scatter, was collected as a single unit prior to excavation.

In September 1983, the site was cleared of vegetation (juniper, pinon, Gambel oak, and yucca) by a Bureau of Land Management fire crew using chain saws. No attempts were made to uproot tree or brush stumps. Once the site was cleared, a better view was available. The site faced south, and dropped off rather sharply from the row of rocks. It also became apparent that the rock line was, indeed, a wall. When the site was cleared, three small drainage channels through the wall could be seen; there were two more either side of the rocks. Almost all artifacts from the surface collection were found in these channels.



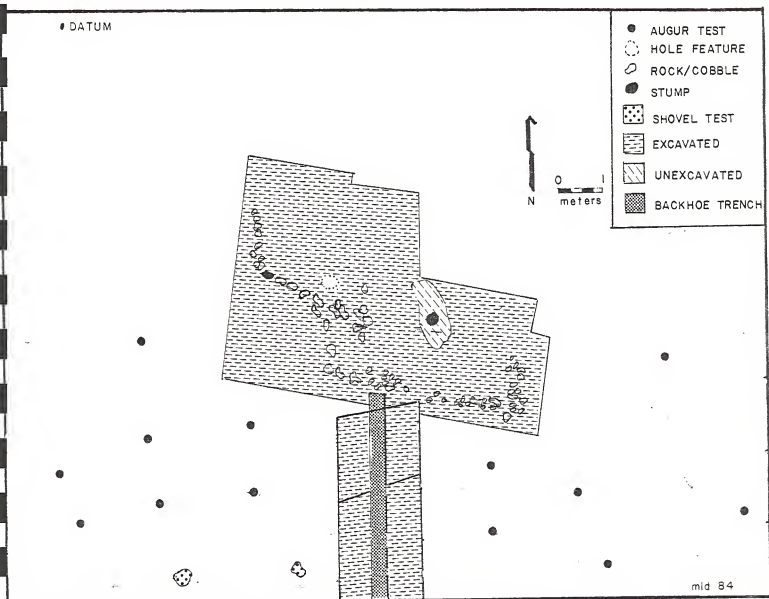


Figure 5: Map of Site 5MT3777, showing the terrace and feature.

### Excavations

The site was mapped using an alidade and plane table; datum was the highest point of the site, the northwest corner (Figure 5). Excavation began at the southeast corner of the rock line with one person trowelling north of the line and one to the south, in order to determine the nature of the stone alignment.

The rock alignment was in two sections (Figure 5). The front section (the southernmost section) was 4 m long, and composed primarily of large river cobbles. Only the southeast corner showed two courses; the rest of the rock was badly eroded and single-course cobbles. The back section was approximately 2 m long and 1 m north of the front; this section also extended to the north for another meter. The entire line was 10 to 15 cm high and about 20 cm wide. A number of similar rocks, i.e., large river cobbles, were seen downslope from the line, presumably as the result of erosion.

Few artifacts were recovered after the initial surface collection was made. Scraping the soil with a shovel showed a normal soil deposition of tree duff, the A horizon, and then a B-C horizon. The rock line extended to the north along the east and west edges; if it had been a room block, it should have extended to the south based as well. Instead, there were no signs of habitation in the area in front of or behind the rock line.

It was decided that the rock alignment represented a terrace wall or check dam (Figure 6). However, there were no laminated sediments in the fill behind the rocks, as has been described for similar

structures (Winter 1977:193). Because of the lack of stratigraphy associated with the dam or terrace, no pollen samples were taken for analysis.



Figure 6: Photograph of Site 5MT3777, showing the terrace, looking east.

One feature (Figure 5, F1) was recorded and excavated. It was a hole, 70 cm in diameter and 15 cm deep, filled with pinon and juniper duff. It appears to have been a rodent hole or nest.

An area south of the terrace was divided into units for excavation by shovel and trowel (Figure 5). The A horizon of soil was filled with rocks and rounded gravel; there were no cultural materials present. A backhoe trench, 50 cm wide and 50 to 75 cm deep, was excavated south of the terrace (Figure 5). It showed a normal A, B-C horizon development without features or cultural materials.

Augur holes were placed in a 2 x 2 m grid southwest and southeast of the terrace (Figure 5) in order to ascertain any buried features. The holes were 10 cm in diameter and 50 to 75 cm deep. No buried features were found; the soil profiles were the same as those in the backhoe trench.

#### Artifacts

##### CERAMICS

Because of the slope of the hill and the nature of the site, there is a high probability that any ceramics found on Site 5MT3777 could have washed onto the site from sites above, especially from the Escalante Site located at the top of the hill. Only three sherds were found while excavating, all in the fill behind the terrace, and these were treated as surface artifacts. The remaining 81 sherds were from the general surface collection made prior to excavation. At least five drainage channels ran through the area; gravels and artifacts appeared as lag materials in these channels.

The small assemblage makes assignment of dates for the site difficult. The only formal type represented is Mancos Black-on-white (Table 7; Appendix A). Based on the types present, and the absence of other types, a date of A.D. 1000 to A.D. 1150 can be postulated (Dean Wilson, Dolores Archaeological Program, personal communication, 1984). Appendix A discusses the methods and results of the ceramic analysis.

Temper analysis permits determination of manufacturing area, and, thus, exchange relationships between areas occupied by the Anasazi. Table 8 shows the kinds and percentages of tempers found in the sherds from Site 5MT3777. All could have been produced locally, and therefore, do not indicate trade with other regions. Appendix A has a further discussion on temper types and distribution.

Ware and vessel form were grouped and compared to provide functional data. Table 7 shows the ware and form classes, and Appendix A provides a discussion of functional data. Most of the sherds come from utilitarian wares, indicating cooking or storage activities. Because of the nature of the site and because of the possibility of sherds washing in, the functional types do not necessarily reflect activities occurring on the site.

#### LITHICS

The lithic artifacts from Site 5MT3777 are from the same context as the ceramics; they were discovered during the surface collection, and were found intermixed with gravels from the drainage channels.

Table 7. Ceramic data summary, Site 5MT3777

---

Culture category:

Tract

Ware

Type

Number

Percent

---

Mesa Verde:

Dolores Tract

Gray ware

Chapin Gray

1

1.2

Gray body sherds

14

16.6

Late Pueblo Gray

4

4.8

Corrugated body sherds

33

39.3

Unclassifiable gray

2

2.4

White Ware

Mancos Black-on-white

8

9.5

Polished white

2

2.4

Sherd white

20

23.8

---

Total ceramics

84

100.0

---

Vessel form:

Gray ware

Jar

54

64.3

White ware

Jar

14

16.7

Bowl

16

19.0

---

Table 8. Ceramic tempers from Site 5MT3777

Temper	No. of graywares	No. of whitewares	Total
Indeterminate		1	1
Percent		3.3	1.2
Andesite-Diorite (A-D)	32	1	33
Percent	59.2	3.3	39.3
Sherd and A-D	4	19	23
Percent	7.4	63.3	27.4
Sherd and quartz sand		2	2
Percent		6.6	2.4
San Juan crushed rock	10		10
Percent	18.5		11.9
Conglomerate	7		7
Percent	12.9		8.3
Sherd	5	5	
Percent		16.6	5.9
Sand and A-D	1	2	3
Percent	1.3	6.6	3.5
Total 54	30	84	

There were 23 flaked lithic tools, 1 nonflaked lithic tool, and 165 pieces of debitage collected. There were no apparent concentrations or distribution patterns beyond those in the drainage channels.

Flaked lithic tools were analyzed according to the Dolores Archaeological Program system (Phagan 1982). All were from local resources, specifically Morrison quartzite, Morrison chert, and Burro Canyon chert. Grain size was primarily very fine ( .125 mm), but two tools were fine-grained (.125-.25 mm) and seven were microscopic (no grains or texture visible through a 10 power scope). Table 9 shows the morphological distribution, and Table 10 shows the dorsal face treatment. Three (13.0%) of these tools, the thin biface and two projectile points show high input of labor in their manufacturing. The rest (87%) are all low input tools, and were primarily utilized flakes (Table 9). The percentage of utilized flakes to other tools is high, and may reflect the nature of the artifacts as having washed down the slope from above sites. It could also reflect the nature of the site as a limited/special activity area as a small field.

Computer analysis SPSS CONDESCRIPTIVE (Nie et al 1975:181-193) for weight was also run on the flaked lithics. The maximum weight was 370 gr; the minimum was 1.0 gr; the mean weight was 29.739 gr, and the standard deviation was 75.465.

One nonflaked lithic tool, a hammerstone, was found. It was a natural cobble and was used without further modification. The category debitage includes flakes, flake fragments, and angular debris; 50 flakes and flake fragments and one piece of angular debris were found. Table 11 shows the analysis of these artifacts.



Table 9. Morphology of flaked lithic tools from Site 5MT3777\*

Morphological type	Frequency	Percent
Utilized flake	18	78.3
Specialized form	2	8.7
Thin biface	1	4.3
Projectile point	2	8.7
Total	23	100.0

\*Table generated from SPSS FREQUENCIES Program (Nie et al 1975:194-202).

Table 10. Dorsal face treatment of flaked lithic tools from Site 5MT3777\*\*

Treatment	Number	Percent
Unworked with cortex	8	34.8
Unworked without cortex	11	47.8
Thinned with cortex	1	4.3
Secondarily flaked	3	13.0
Total	23	100.0

\*\*Table generated from SPSS FREQUENCIES Program (Nie et al 1975:194-203).

Table 11. Analysis of lithic debitage from Site 5MT3777

	Number	Percent	Mean weight
Flakes/Flake fragments			
Grain size			
Medium	3	6.0	27.0
Fine	4	8.0	10.3
Very fine	35	70.0	11.4
Microscopic	8	16.0	2.5
Total	50	---	10.8
Items with cortex	19	42.2	---
Whole flakes	45	90.0	---
Nonlocal items	--	---	---
Angular debris	1		17.0

### Conclusions

Site 5MT3777 appears to be a check dam/terrace to control soil erosion on a fairly steep hillside; in effect, the terrace wall created a small field, about 0.1 acre. These terraces occur throughout the Southwest on steeply sloping land. Winter (1977:198) defines this kind of erosion/water control as a slope wash terrace, constructed primarily for soil control rather than water control. The five drainage channels through the site are merely paths down the hillside rather than actual cut drainage streams, and it would seem that the reason for constructing the terrace wall was to control soil erosion down the hill.

An obvious side effect of controlling soil erosion is to build up tillable soil behind the terrace. Brew (1946:10) reports fields such as these from Alkali Ridge. Rohn (1963:443) reports more than 900 recognizable dams on the surveyed area of Chapin Mesa in Mesa Verde National Park; Hayes (1964) reports similar numbers from Wetherill Mesa. Woodbury (1961) classifies the forms of fields found in the Point of Pines area, Arizona. Gould (1982:131) reports fields below the Mustoe Site south of Goodman Point in Montezuma County, Colorado, and Neily (1983:84) reports terraces and fields on Squaw and Cow Points in Colorado and Utah. Winter (1975:98; 1976:84-122; 1977:188-209) recorded and excavated several check dams and terraces in the Hovenweep area. In the Chaco area, fields, terraces, check dams, and reservoirs are often reported in association with the outlying pueblos (Marshall et al 1979). At Bandelier, terraces and

check dams were recorded and investigated (Fox 1982:425-431). In all of these places, the assumption is that terraces were constructed to control erosion, but perhaps just as important, to provide additional land for agriculture.

For dry land farming, with terraces reflecting such a strategy, the yields of corn are approximately 15 bushels per acre (Ken Peterson, Dolores Archaeological Program, personal communication, 1984). Therefore, an area the size of Site 5MT3777, 0.1 acre, would yield 1.5 bushels, and at 25.55 kg per bushel, 38.32 kg of corn (84 lb). It would seem more likely that, if the site were used as a garden plot, crops other than corn would be more appropriately grown there. Figures for the yields of beans, squash, or any other possible crop are not available here. Because of the lack of pollen or other plant remains, the actual use of the site is not clear.

The dates the site was used are within the range of A.D. 1000 to A.D. 1250. Sites in the area range from A.D. 600 to A.D. 1300, with those in the Dolores River valley tending to fall into the earlier periods. Those prehistoric sites on the hillside generally are in the later, Pueblo II to Pueblo III periods.

The artifacts found on the site do not necessarily relate to activities on the site, because they could have washed down from above. However, they could also be indicative of storage and plant procurement activities on Site 5MT3777. They do not indicate any unusual activity. The site area had been badly washed, and was without features, so that soil samples taken for analysis would not have provided any useful information about the function of the site.

The site is in the Mesa Verde Region, the Yellowjacket District, the Escalante Sector, and the Escalante Locality of the Dolores Archaeological Program spatial terminology (Kane 1983a:19-19). It is a limited activity locus, an agricultural site or garden plot (Kane 1983a:20-21) for resource procurement.

### CHAPTER 3

#### EXCAVATIONS AT CASA DE SUEÑOS, SITE 5MT3778

Casa de Sueños, Site 5MT3778, was located in April 1983, during a reconnaissance of the area where the Anasazi Heritage Center was to be built. The site is located at UTM zone 12, 717220 mE, 4150450 mN. Vegetation on the site was primarily Gambel oak, with pinon and juniper surrounding the area. A rubble mound was visible prior to excavation, indicating the presence of a collapsed structure (Figure 7).

In September 1983, the vegetation was cleared to ground level by a Bureau of Land Management crew using chain saws. No root removal was attempted until excavations began. After clearing the vegetation, collection of visible surface artifacts was made. The limit of the artifact scatter, 15 by 20 m, determined the boundary of the site.

#### Excavations

The site was mapped with a Brunton compass using the same datum as for Site 5MT3777. Excavations began in the area of the rubble mound, which was quickly determined to be a single masonry surface room. Two or three people worked around the outside perimeter of the room to determine the presence of additional rooms or of a plaza area (Figure 8). Two people worked in the interior of the structure. Excavations were begun with shovels and trowels, but because of numerous tree roots, as much excavation took place with a mattock and Pulaski fire tool as with a shovel and trowel.

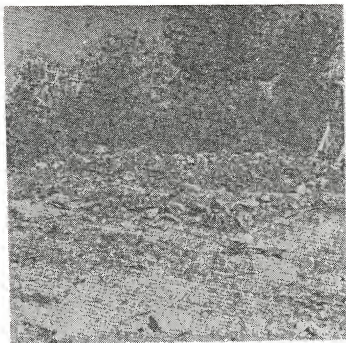


Figure 7: Photograph of masonry surface room, Casa de Sueños, looking north.

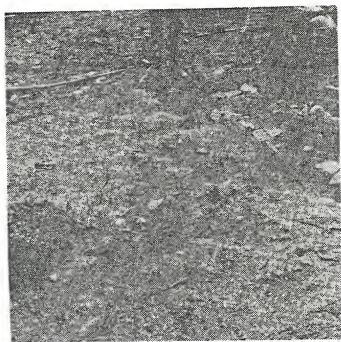


Figure 8: Photograph of plaza area, south of masonry surface room, Casa de Sueños, looking west.

As excavation of the room proceeded, a 2 x 2 m grid of augur tests was placed south and east of the room to determine the presence of a trash midden or of other features. Each test was 10 cm in diameter and 50 to 75 cm deep. One test, 10 m south of the south wall of the room, recovered small pieces of charcoal at 50 cm depth; no other test had any evidence of cultural activity.

A 1.5 x 1.5 m test pit was placed around the positive augur test. Within 10 cm of the surface, two rocks set at an angle to each other were found. Below these were additional courses; this was determined to be a ventilator shaft for a pitstructure, later defined as a kiva.

From the test pit, a 1.5 m wide trench was begun north-south through the pitstructure (Figure 9). The northern edge of the pitstructure was apparent 10 cm below the modern ground surface. Excavations in the trench were done with mattock and shovel. The soil was not screened, but artifacts were collected. There were three visible strata of deposition in the kiva: (1) normal A-horizon soil development; (2) wind and water deposition; (3) collapse from the walls and roof of the structure. These strata are discussed in detail below.

The trench exposed the east side of the kiva, uncovering a bench or banquette and two partially collapsed pilasters. After these features were defined, the trench continued to be excavated to a depth of 1.75 m. A backhoe was then used to remove the fill throughout the rest of the kiva to within 50 cm of the walls and floor. The rest of the fill was removed by mattock, shovel, and trowel. The last few centimeters of fill were removed from the walls and floor by trowel.

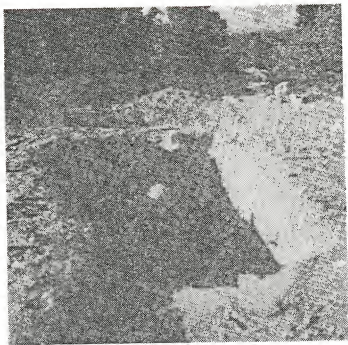


Figure 9: Photograph of trench through east side of kiva, Casa de Sueños, looking south.

#### ARCHITECTURAL REMAINS

The two architectural features at Casa de Sueños are the room and the kiva. They are aligned with one another, have similar material culture, and are assumed to be contemporaneous. Ceramic cross-dating shows the time of occupation to be early Pueblo III, A.D. 1150 to A.D. 1200, McElmo Phase in the Mesa Verde sequence (Hayes 1964), or late Sundial Phase in the Dolores Archaeological Program sequence (Kane 1983:27).

#### Masonry Surface Room

The room is rectangular with rounded corners (Figures 10 and 11). The walls are coursed masonry with up to five courses preserved (Figure 12). The structure measures 2.3 m north-south and 2.9 m east-west for an area of  $6.67 \text{ m}^2$  for the interior.



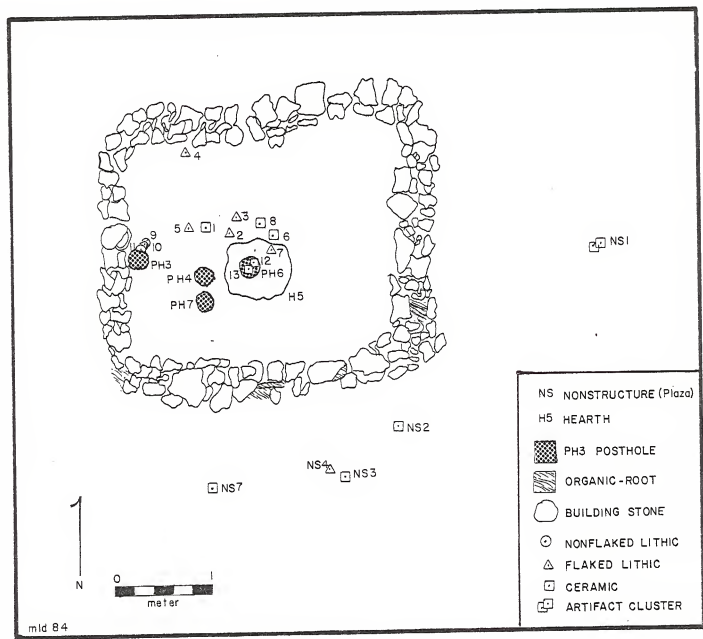


Figure 10: Map of room, Casa de Sueños.

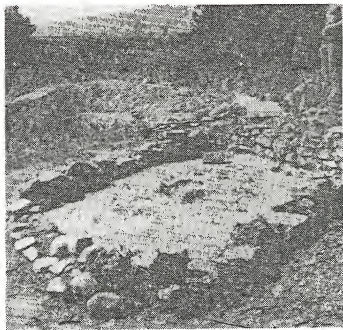


Figure 11: Photograph of excavated surface room, Casa de Sueños, looking southwest.

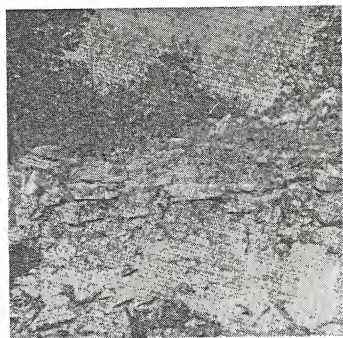


Figure 12: Coursed masonry walls of the surface room at Casa de Sueños.

The north and east walls are composite masonry of shaped and unshaped sandstone and river cobbles (Figures 11 and 13). The core materials consist of mud and small sandstone chunks. The construction of the south and west walls is difficult to determine because of wall fall and erosion, but they appear to be a single course wide (Figure 14). The shaped sandstone, when it occurred, showed no pecking. Substantial portions of the walls had collapsed into the room and in the plaza area surrounding the exterior walls. Mortar, consisting of native soil adobe, is present between stones in the remaining standing walls. The foundation beneath the walls is native earth, with no apparent footing trench. The walls are horizontally coursed with no cross-jointing.

The corners of the room are all bounded masonry; no abutments were observed. The northeast and northwest corners are rounded (Figure 15). The southeast and southwest corners appear square, but the walls have slumped outward in both corners, leaving the prehistoric shape indeterminate. It is not possible to determine exterior and interior wall treatments. The remaining walls are 20 to 50 cm high; based on the amount of building stone rubble, the room was probably 2 m high before collapse.

The surface or floor of the room is use-compacted, bounded on all sides by coursed masonry. There is no apparent prehistoric modification of the floor surface beyond clearing and leveling; it is packed B-C horizon soil. No construction material, foundation, or sub-base is present. No remodeling of the room or floor was observed, but a

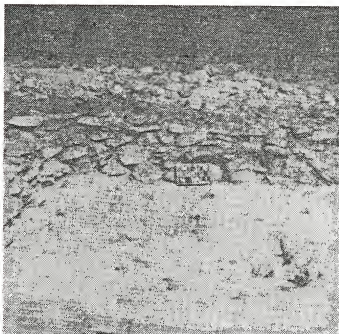


Figure 13: Structure of north wall of surface room, Casa de Sueños.

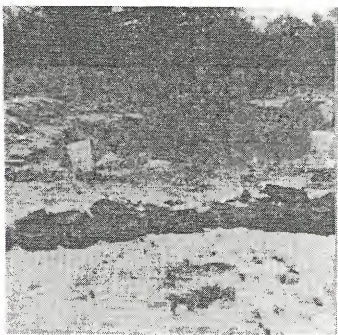


Figure 14: Structure of south wall of surface room, Casa de Sueños.

posthole was found within the central hearth, perhaps suggesting reoccupation with some remodeling. There is no evidence of burning within the structure.

#### Features

Features 3, 4, 6, and 7 are all postholes on the room floor (Figure 10). None appears to be primary roof supports because of their location in the center of the room rather than the corners, but they could nevertheless have helped support the roof. Feature 3 (Figures 10 and 16) was about 3 cm east of the west wall. It was 15 cm deep, 8 cm in diameter, and cylindrical. It contained fragments of unburned wood too rotted to collect for species identification. A single vertical sandstone shim lay flush against the south side of the feature. The fill consisted of dark brown silty sand, similar to the fill within the room. The base and walls of the feature were detected by the presence of sterile B-C horizon. No modifications were observed. Three axes (Point Locations 9, 10, 11, Figure 10) were located adjacent to the feature, and were apparently leaning against the post before it rotted.

Feature 4 (Figures 10 and 16) is another posthole, 80 cm east of Feature 3. It was 9 cm deep, 10 cm in diameter, and cylindrical. It contained small bits of rotted wood fragments in no discernible pattern. A sandstone shim was flush against the south wall of the posthole. The walls and base were defined by sterile B-C horizon.

Feature 6 is a posthole set through the central hearth (H5, Figure 10). It was 14 cm in diameter, 18 cm deep, and cylindrical. The fill

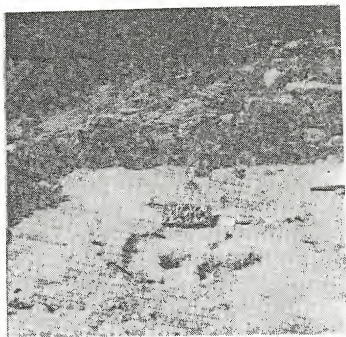


Figure 15: Rounded corners of southwest corner of surface room, Casa de Sueños. Also, Features 5 and 6, the hearth and a posthole.



Figure 16: Features 3 and 4, postholes of the surface room, Casa de Sueños.

contained charcoal flecks and room fill. The sides and bottom were delineated by hard-packed, sterile B-C horizon. Some rotted wood was present. There were no artifacts or further modifications. Because of the charcoal and because of the hearth structure, this posthole appeared to be excavated through the hearth after the latter feature had been abandoned.

Feature 7 is the fourth posthole, 20 cm south of Feature 4, 42 cm east of the west wall, and 59 cm north of the south wall. It was 10 cm in diameter, 14 cm deep, and cylindrical. A vertical sandstone shim was set against the south wall of the posthole. The fill was room fill containing rotted wood fragments. The walls and the base were defined by sterile B-C horizon. No modifications were observed and no artifacts were associated with this particular feature.

Feature 5 is the central hearth, a shallow, 7 to 10 cm deep, indentation in the floor (Figures 10 and 16). It is 50 cm in diameter and is basin-shaped. The walls of the hearth are sterile B-C horizon, oxidized to a depth of 0.5 cm beneath the feature. The hearth contained a dark brown sandy silt fill with interspersed charcoal flecks. Excavation of the hearth occurred in two parts, the west half first, then the east half. No modifications to the hearth, no rocks, and no coping were observed. However, Feature 6, a posthole, went through the west half (Figure 16), suggesting a later use of the room. The hearth was low cost (unelaborate and without refinements) in construction and maintenance, suggesting limited or temporary use. Two corrugated sherds were located on top of the hearth (PLs 12 and 13).

The posthole features do not appear to have held the primary supports for the roof. Rather, the roof appeared to have been supported primarily by the coursed masonry walls. Features 3, 4, and 7 all have shims and may have been put in when the room was built. Feature 6 was put through the hearth at a later date, perhaps helping to support a sagging roof. Since the hearth (Feature 5) was not used after the post was installed, and only rarely before, based on limited oxidation of the subsoil and the lack of materials in the hearth, further evidence of the limited/temporary use of the room is indicated. There is no evidence to indicate habitation in the room.

#### Floor Artifacts

A total of 13 artifacts were mapped on the floor of the surface room (Figure 10). Table 12 lists these point locations. The three ground stone axes (PLs 9, 10, and 11) appear to have been stored together and adjacent to a post in Feature 3. The corrugated body sherds (PLs 1, 8, 12, and 13) may be all from one vessel. Additional corrugated sherds, perhaps from this vessel, were found in the fill above and around the hearth. Only one of the flaked lithic items was a high input item (PL 3, a biface); the others were utilized flakes (Table 12).

The material culture in the room also supports the limited/temporary use of it. Artifacts associated with habitation are not present or are not in sufficient numbers to support habitation activities. That is, there are no manos and metates in the room; the corrugated ceramics suggest storage as a primary function, and the hearth does not show enough use to indicate habitation.



Table 12. Point located artifacts, surface room,  
Casa de Sueños

PL No.	Item description
1	Corrugated body sherds
2	Chert, flake, utilized
3	White chalcedony biface
4	Chert flake, utilized
5	White chalcedony flake
6	Grayware body sherds
7	Chert flake, utilized
8	Corrugated body sherd
9	Ground stone axe
10	Ground stone axe
11	Ground stone axe
12	Corrugated body sherd
13	Corrugated body sherd

#### Bulk Soil Samples

Bulk soil specimen samples were the only special samples collected from the room. Two samples were taken, one from Feature 6, the posthole through the hearth, and one from Feature 5, the hearth itself.

Results are shown in Table 13.

The conifer sample from the posthole, Feature 6, may indicate the remnants of a wooden post; other plant remains from Feature 6 may have come from the hearth when the posthole was put through it. A more complete discussion of the bulk soil analysis results is in Appendix B.

Plant species identification samples were taken from posthole Features 6 and 7. Feature 6 contained 3.8 gm of charred juniper (Juniperus sp.) and 1.5 gm of noncharred juniper. It also contained 1.0 gm of noncharred conifer wood (Gymnospermae), as mentioned above. Feature 7 contained 2.0 gm of noncharred cottonwood (Populus sp.).

The noncharred specimens may represent the wood of the posts occupying the postholes, although the two species in Feature 6 do not clearly represent a single post.

#### KIVA

The subterranean kiva is associated with the room by its location immediately south of the surface room (Figure 17); by its orientation to the room (Figure 18); by its artifacts which place both structures in the same time frame, Pueblo III, McElmo Phase (A.D. 1150-1200). The kiva shows more varied and a greater intensity of use than the

Table 13. Plant remains from bulk soil samples, surface room, Casa de Sueños

Location	Weight or number of sample	Condition
Feature 5 - Hearth, Bulk Soil No. 4		
Wood		
Pine wood ( <u>Pinus</u> sp.)	.1 gm	charred
Indeterminate bark	.1 gm	charred
Seeds/fruit		
Goosefoot fruits ( <u>Chenopodium</u> sp.)	1	charred
Indeterminate seeds	2	charred
Cultigens		
Corn cupule (cob part ( <u>Zea mays</u> ))	1	charred
Feature 6 - Posthole, Bulk Soil No. 3		
Wood		
Pine wood ( <u>Pinus</u> sp.)	.1 gm	charred
Rose family wood ( <u>Rosaceae</u> )	.1 gm	charred
Conifer wood ( <u>Gymnospermae</u> )	.1 gm	noncharred
Seeds/fruit		
Goosefoot fruit ( <u>Chenopodium</u> sp.)	11	charred

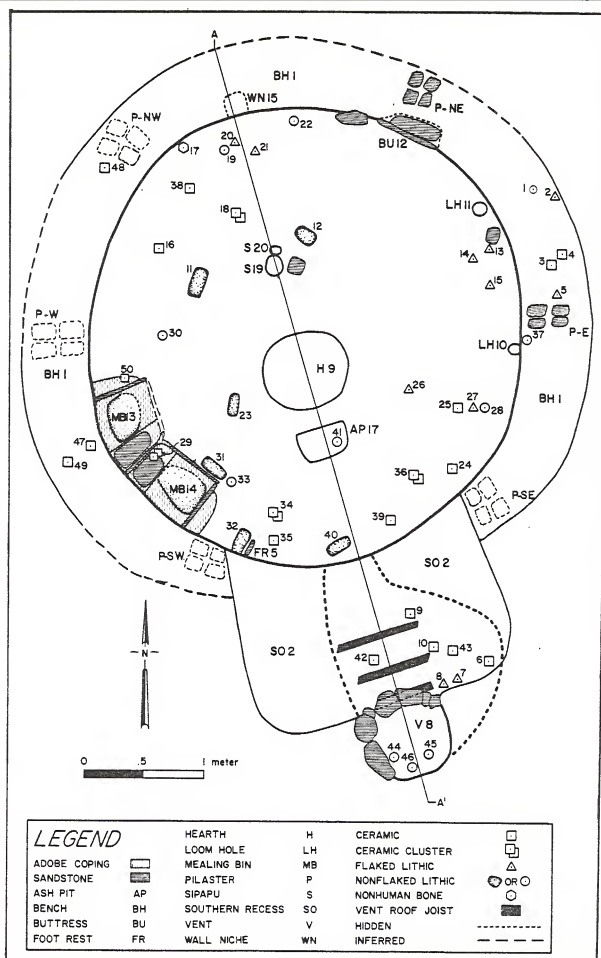


Figure 17: Map of kiva, Casa de Sueños.

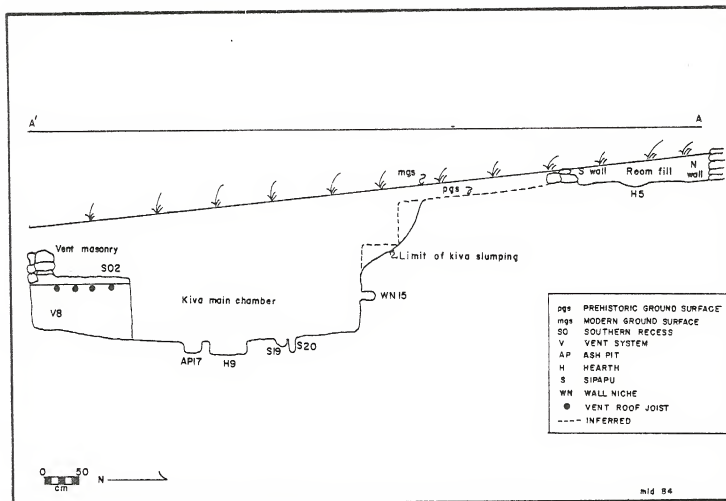


Figure 18: Cross-section of kiva and surface room, Casa de Sueños, facing west.

surface room, as shown by the type of features (e.g., mealing bins) and artifacts (e.g., manos, metates, ceramic vessels). The kiva is a typical Mesa Verde style kiva of the early Pueblo III period (Morley 1908:601-603; Prudden 1918:9-13; Rohn 1977:251; Martin 1936:40-46; Brew 1946:203-214; McLellan 1969). McGregor (1965:334) defines kivas from this period as:

. . .Kivas are abundant and very characteristic. They are as round as it was possible to build them and average about 13 feet in diameter. They are always underground or, where close bedrock was encountered, excavated as far as possible, a retaining wall being built around them and the intervening space filled with earth. A narrow bench with six masonry pilasters encircles the room, thus forming six equal-length segments, the southernmost of which is widened to form a platform. A ventilator leads under this southern recess to the floor. Beyond it is a masonry or wattle-work screen or deflector, beyond this a firepit, and still farther in a straight line a sipapu three or four inches in diameter. This type appears to have been strictly adhered to.

The kiva at Casa de Sueños also is much like the one excavated at the Dominguez Site (Reed 1979:27-34). Neither kiva has a masonry lining.

The kiva is circular, subterranean, and contains eroded remnants of a bench (Figure 18), the surface of which is about 1.60 m above the kiva floor. South of the circular main chamber is a D-shaped southern recess, the surface of which is 75 cm above the kiva floor.

Dimensions of the kiva, excluding the bench and southern recess are 3.80 m north-south and 3.65 m east-west. Including the bench and southern recess the dimensions are 5.60 m north-south and 4.80 m east-west. The depth is 2.0 m at the north wall and 1.2 m at the east wall; the inferred depth is 2.8 m below modern ground surface.

The walls of the kiva were excavated into the sterile C-horizon soil. No earlier structures were truncated by the kiva construction. No masonry was used in the walls; however, the six pilasters and the vent shaft were masonry. Feature 12 (Figure 17) consists of two vertical sandstone slabs, apparently used as a buttress to support a slumping wall beneath the northeast pilaster.

There were two distinct plastering episodes on the walls and floor. For the first plastering, a beige-green sandy silt was used on a foundation of the sterile C-horizon. The second plastering episode consisted of red adobe, which was placed over the first plaster. The buttress (Feature 12) was plastered over by the second episode, showing evidence of remodeling. The hearth (Feature 9, Figure 18) also shows remodeling, as do other features discussed individually below.

The roof of the kiva had collapsed, but the construction appeared to be composite based on roof-fall remnants found on the floor and within the fill. The roof was log cribbing, stones, and adobe. Remnants of logs existed in the upper fill, going from the northeast to the west pilaster and from the northeast to the east pilaster. The logs were identified as juniper (Beth Griffiths, Dolores Archaeological Program, personal communication, 1984). Evidence of burning of the kiva showed on the outer portions of the logs, but burning was incomplete, and the inner portions were unburned and rotted. Since the logs were incomplete and rotted, they were not suitable for tree-ring dating.

#### Stratigraphy

Figure 19 shows the stratigraphy of the kiva. There are three definable strata indicating (1) A-horizon soil development; (2) wind and water deposits; (3) the original collapse and fill of the kiva.

Stratum 1 is a relatively uniform 20 to 25 cm deep, A-horizon soil. The soil is light brown and platy textured. There are no

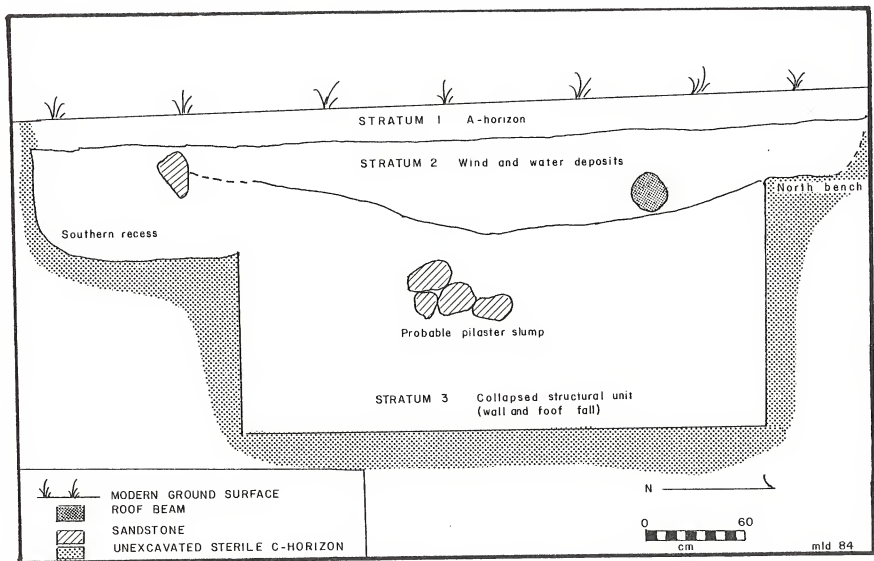


Figure 19: Stratigraphy of kiva, Casa de Sueños, facing west.

cultural contexts, but some ceramics and flaked lithics are present, apparently due to slope wash from the room located upslope. Little or no charcoal appears in this stratum. Heavy bioturbation occurs from numerous small, fine roots and rodent activity.

Stratum 2 blends with Stratum 1 in its upper contact, making an indistinct boundary. However, contact between Strata 2 and 3 is very sharp, consisting of a black mat about 0.5 cm thick. Beneath the black line there is some evidence of oxidation; the upper portion of Stratum 3 is baked orange-red. Stratum 2 ranges from 40 cm thick at the kiva edges to 60 cm near the center of the structure. The texture of Stratum 2 is granular sandy silt; it is tan. Charcoal flecks are present throughout the stratum but there are no concentrations. Two partially charred roof beams were found "floating" near the north wall with ends attached to or point to pilasters 2, 3, and 4 (Figure 18). Laminations, 1 to 2 mm thick, are present in Stratum 2, but no cultural surfaces were observed, suggesting this stratum is post-abandonment in origin.

Artifacts are abundant throughout Stratum 2, but many appear to be post-abandonment in origin and filtered between wind and water-deposited laminations. An exception is a concentration of three or four ceramic vessels, one axe, and two flat ground stones, adjacent to or on the northeast bench (BH 1, Figure 18). It is assumed that these artifacts were resting upon the bench and were forced into the fill by slumping walls or collapsing roof (Figure 18, PLs 1-5). These artifacts were collected separately from the remaining artifacts within Stratum 2.



Stratum 3 begins beneath the black band at the lower edge of Stratum 2. Artifacts are less frequent than in Stratum 2; charcoal flecks are virtually absent. Rather, Stratum 3 appears massive in structure, perhaps indicative of a single dumping episode, i.e., the collapse of the kiva walls and roof. The soil texture is more silty and less sandy than that of Stratum 2. The color is light tan, suggesting higher proportions of caliche than in the above strata.

The deposits within Stratum 3 primarily show the collapsed structural unit. Roof fall is shown by the partially burned, partially rotted cribbing and some rocks from the rooftop. Wall fall is seen by the slumping of the plasters and some of the C-horizon onto which the plasters were applied. Bench collapse is actually a continuum of the wall fall. Only along the eastern portion from the northeast pilaster to the southern recess was the bench well defined; along this portion several artifacts (Table 14; Figure 18) could be associated with the bench surface. Along most of the wall, the horizontal portions of the bench had slumped into the kiva main chamber. The weight of the pilasters probably contributed to wall and bench collapse. Hatchway collapse is suggested by four large, shaped, thin, sandstone slabs which were in the fill directly above the central hearth.

Missing from Stratum 3 is any evidence of intentional trash dumping into the abandoned kiva. Artifacts were present, but were apparently from the bench (Figure 19) or the roof prior to its collapse. Also missing was evidence of a secondary cultural occupation of the kiva after the structural collapse. Therefore,

occupation of the structure was confined to the original construction and its remodeling period.

### Surfaces

The surface discussed here covers all the horizontal areas within the kiva; the floor of the main chamber, the bench (H1, Figure 17), the southern recess (S0, Figure 17), and the vent system (V8, Figure 17). On the main chamber floor there are two plastering episodes. However, there is no plaster evident on the bench top, and a single red adobe plaster occurs within the southern recess. The edges of all these surfaces are bounded by vertical walls.

The foundation for surfaces throughout the kiva is sterile C-horizon soil. On the floor, there is no prepared sub-base for the first plastering episode; the first plaster layer serves as a sub-base for the second plastering episode. The floor plaster is coped up the sides of the wall; plaster continues up the wall to the slumped areas.

The first floor and wall plaster appears to be associated temporally with kiva construction. As stated above, the foundation for this plaster was sterile C-horizon on both the floor and walls. It consisted of a beige-green sandy silt about 1 cm thick. One goal of this plastering episode was to level the floor and walls. No artifacts or features could be definitely associated with the beige-green plaster.

The second plaster apparently was applied during the use-life of the kiva. A red adobe plaster, about 1 cm thick, was applied on top of the earlier beige-green plaster on the main chamber floor, the kiva

walls, the southern recess, and the vent system, obscuring the earlier plaster. All but two point locations (Table 14) associated with the floor are atop the second plaster. Three artifacts, PLs 30, 38, and 39, appeared use-compacted by the prehistoric inhabitants into the red plaster. A sherd (PL 50, Figure 17) was found beneath the red plaster coping of a meal bin (MB13, Figure 17); the sherd was atop the beige-green plaster. In the collapse of the kiva, the two surfaces of the southern recess and the vent system are superimposed on one another; they are separated by fill and structural collapse (see feature descriptions below).

#### Features

##### Bench

Feature 1 (Figure 17) is the kiva bench system. Originally it surrounded all of the kiva main chamber except for the southern recess (Feature 2, Figure 17). The bench is an average of 55 cm wide, and is approximately 1.60 m above the kiva floor. Unlike the floor and southern recess, the bench surface was not plastered. Rather, it was constructed in the sterile C-horizon and covered with a thin ashy or organic lens. All point locatable artifacts were found atop this lens (Table 14) on the eastern bench.

The bench had slumped from the northeast pilaster along the western side of the kiva. Less than one-third of the bench surface remained as a result of slumping. Most of the back walls were gone. There were no point locatable artifacts in the areas of slumping, but there were artifacts in the fill below the bench that may show an original location on the bench.

Table 14. Point locations associated with the kiva floor,  
Casa de Sueños (page 1 of 2)

PL No.	Location	Item description
1	F1, bench top	Shaped rectangular sandstone slab
2	F1, bench top	
3	F1, bench top	10 corrugated jar sherds, reconstructable
4	F1, bench top	ca 20 corrugated jar sherds, reconstructable
5	F1, bench top	Flaked lithic
6	F2, southern recess	Unfired ceramic, jar lid
7	F8, vent system	Flaked lithic (knife blade)
8	F8, vent system	Flaked lithic, biface fragment
9	F8, vent shaft	Corrugated ceramic jar sherds
10	F8, vent system	Corrugated jar sherd
11	Floor	Nonflaked lithic, shaped slab
12	Floor	Nonflaked lithic, mano
13	Floor	Flaked lithic
14	Floor	Flaked lithic
15	Floor	Flaked lithic
16	Floor	Ceramic
17	Floor	Nonhuman bone, worked bone
18	Floor	Unfired ceramic
19	Floor	Nonflaked lithic, mano
20	Floor	Flaked lithic
21	Floor	Flaked lithic
22	Floor	Nonflaked lithic, mano
23	Floor	Nonflaked lithic, mano
24	Floor	Ceramic
25	Floor	Ceramic
26	Floor	Flaked lithic
27	Floor	Flaked lithic
28	Floor	Nonflaked lithic, mano
29	Floor	Reconstructable ceramic, San Juan whiteware
30	Floor	Broken sandstone jar lid
31	Floor	Nonflaked lithic, mano
32	Floor	Nonflaked lithic, mano
33	Floor	Nonflaked lithic, hammerstone
34	Floor	Reconstructable ceramic, jar
35	Floor	Ceramic, painted bowl sherd
36	Floor	Ceramic, reconstructable jar, beneath metate
37	F1, bench top	Shaped sandstone jar lid
38	Floor	Ceramic, corrugated sherd
39	Floor	Ceramic, corrugated body sherd
40	Floor	Nonflaked lithic, mano, beneath vent slab
41	Floor, AP17	Unmodified stream pebbles
42	F8, vent shaft	Ceramic, painted bowl sherds
43	F8, vent shaft	Ceramic
44	F8, vent shaft	Nonflaked lithic, mano

Table 14. Point locations associated with the kiva floor,  
Casa de Sueños (page 2 of 2)

PL No.	Location	Item description
45	F8, vent shaft	Nonflaked lithic, mano
46	F8, vent shaft	Nonflaked lithic
47	F1, bench top	Ceramic, corrugated
48	F1, bench top	Ceramic, corrugated
49	F1, bench top	Ceramic, corrugated
50	Floor, M13	Ceramic beneath exterior coating

There were four definable masonry pilasters and two more could be inferred from the structure. The east and northeast pilasters were still partially resting on the bench, although both did show some slumping into the fill. The west and northwest pilasters had both collapsed with the bench into the fill. The two inferred pilasters were on either side of the southern recess. Both had slumped into the fill, and the masonry had mixed with other rocks from the collapse of the roof and vent system. Reports on construction of kivas from this period (A.D. 1150-1200) containing the southern recess, show six pilasters with two on either side of the southern recess (Brew 1946; Prudden 1918; Rohn 1977).

#### Southern Recess

Feature 2 is the southern recess, a D-shaped recess built into the C-horizon when the kiva was constructed (Figure 17). The floor of the recess opens north into the kiva main chamber. Dimensions are 2.5 m east-west, 1.35 m north-south, with the surface 1.10 m above the kiva floor. No modifications were observed.

The walls consist of sterile, unplastered C-horizon; the floor is covered with 1 cm thick red clay plaster, apparently from the second plastering episode. The plaster terminates at the junction of the floor and walls. There was no observed partition between the recess and the main chamber. The vent tunnel did extend beneath the recess floor. Five point-locatable artifacts (PLs 6-10, Table 14) are associated with the southern recess.

The central one-third of the recess floor collapsed after the kiva was abandoned and is compressed 60 cm beneath the rest of the floor into the vent tunnel. Three or four horizontal wooden joists were compressed into the plaster, and were apparently part of the floor of the recess in addition to forming the top of the vent tunnel. The collapse of the structure apparently caused this part of the floor to fall into the vent tunnel; six or seven sandstone slabs were on top of the joists and plaster (Figure 20).

#### Vent System

Feature 8 is the kiva vent system (Figures 17, 20, and 21), part masonry and part adobe construction. The shape of the tunnel system is bulbous. At its widest the tunnel is 1.32 m; it is 1.36 m long from the back of the tunnel to its opening on the main kiva floor, and it is 85 cm from the floor to the top of the southern recess floor.

The asymmetrical shape is apparently due to the necessity of accommodating a large sandstone slab (85 cm x 55 cm x 5 cm; Figure 22) that formed part of the tunnel roof and served as a foundation to support part of the vent shaft masonry (Figure 21). Once the slab was in place, construction fill narrowed the tunnel opening to about 50 cm wide. Three courses of masonry formed the actual vertical vent shaft opening. The sandstone slab vent cover was about 60 cm high, thus corresponding to a tunnel height of about 50 cm (Figure 23).

The fill above the collapsed recess floor was identical to the upper kiva fill, Stratum 3. Below the recess surface, upper kiva fill was mixed with collapsed, redeposited, sterile construction fill. Two

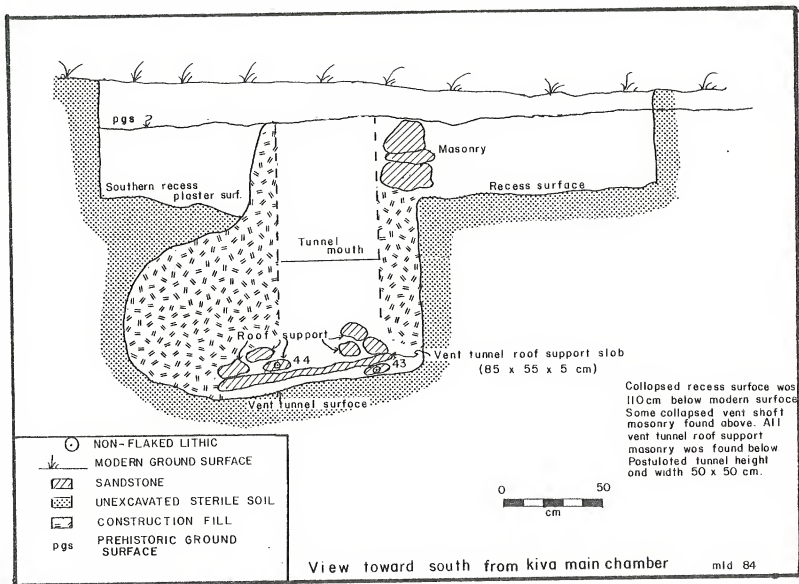


Figure 20: Construction of southern recess and vent system of kiva, Casa de Suenos.



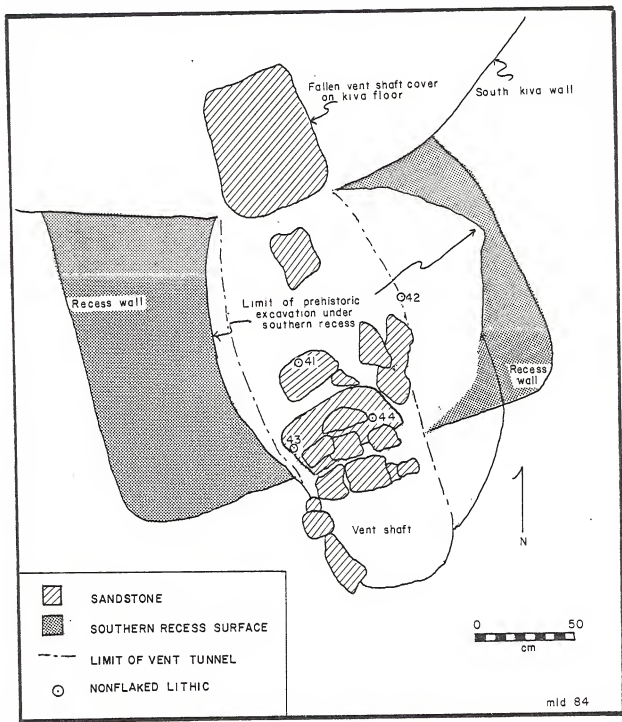


Figure 21: Diagram of vent system of kiva, Casa de Sueños.



Figure 22: Large sandstone slab in the vent system of the kiva, Casa de Sueños.

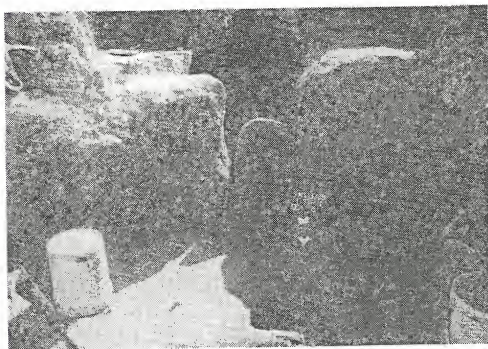


Figure 23: Vent tunnel slab cover in the kiva, Casa de Sueños, facing south from the main chamber.

manos (PLs 44 and 45), one bowl (PL 42), and two other PLs (43 and 46) were found on the vent floor (Table 14).

### Hearth

Feature 9 is the central hearth of the kiva (Figure 17). Its plan is round, and its profile is basin-shaped. It is 72 cm long, 66 cm wide, and 23 cm deep. Four fill sequences and two cut sequences are visible (Figure 24).

The first fill was the earliest. It consists of sand, which eventually oxidized, placed over sterile C-horizon into which the feature was dug. The second fill sequence covered the first. It was a fine-grained green sand, resembling the initial plaster found elsewhere in the kiva. Neither the first nor the second fill had organic inclusions or associated artifacts.

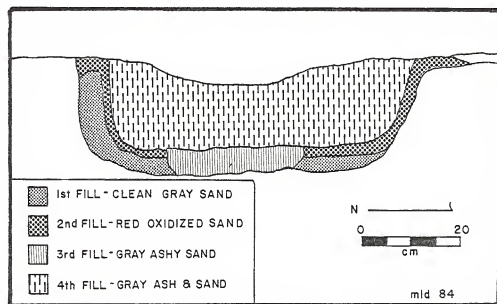


Figure 24: Stratigraphy of hearth in kiva, Casa de Sueños.

The third fill sequence truncated portions of the first two. Much of the sandy fill was removed (Figure 24) and replaced with a light gray sand and ash mixture, which had organic inclusions. This level was fired very hard. The fourth fill sequence represents a possible truncation of portions of the first three. It is a gray-black sandy fill that contains small bits of charcoal, ceramics, and flaked lithics. Masonry was never part of hearth construction.

#### Ash Pit

Feature 17 is the ash pit located between the hearth (H9) and the vent system (V8). It is D-shaped in plan (Figures 17 and 20), 40 cm long (east-west), 27 cm wide (north-south), and 17 cm deep. The broad axis faces the hearth.

There are two fill/use sequences within the feature (Figure 26). Level 1 consists of a gray-black sandy fill, rich in organics. This level was bounded on the bottom by a horizontal sandstone slab (Figures 25 and 26) approximately the size of the pit. The slab was heavily oxidized to a red color and a crumbly texture. On the slab was a fire-blackened and -cracked stream cobble. The top of Level 1 was covered by a layer of redeposited fill and red plaster, indicating the feature was not used during the latter part of the life of the kiva.

Level 2 was directly beneath the sandstone slab found at the bottom of Level 1.

The level terminated at the sterile C-horizon. The fill consisted of a gray-black, ashy sand, rich in organics. Three nonhuman bones,

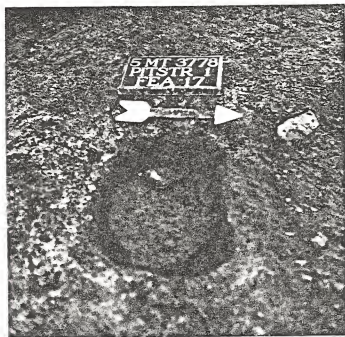


Figure 25: Feature 17, ash pit in kiva, Casa de Sueños.

one of which was the skull of a small rodent, were found and collected from this level. Three stream pebbles, possibly a pot rest, were recorded as PL 41 (Table 14), but were in the fill, not on the bottom of the feature (Figure 26). The bottom, sterile C-horizon, was stained a sooty gray.

It appears that after the construction of Feature 17 there were at least two remodeling episodes. The initial construction of the ash pit occurred when the kiva was built, given the well-preserved state of the C-horizon base. The first modification came when the sandstone slab was set in place, which simply raised the base of the feature about 10 cm. The second modification occurred when the feature was abandoned, during which unburned fill was deposited, then capped with a lens of red adobe plaster, similar to the red floor plaster.

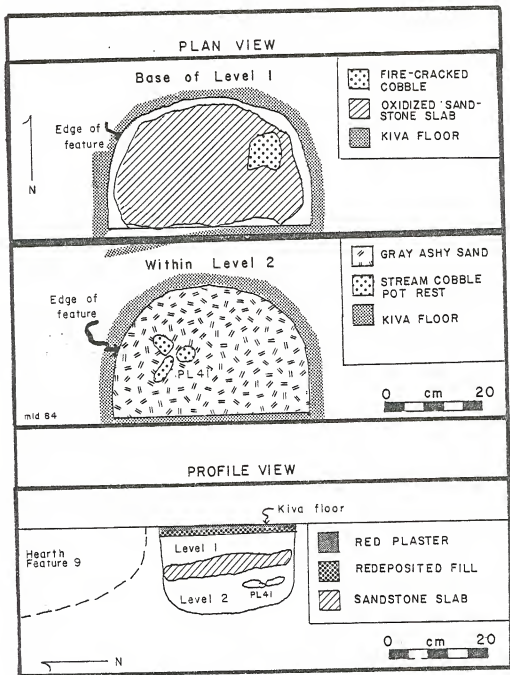


Figure 26: Diagrams of Feature 17, ash pit in kiva, Casa de Sueños.

### Loom Holes

Features 10 and 11 are apparent loom support holes on the east side of the kiva floor (Figure 17). They are similar in construction and are 1.1 m apart. Both were dug through the floor plasters, were not plastered on the interior, had no coping, and were unelaborate in manufacture and maintenance. Loom holes are not common in kivas, but are not unknown (Cattanach 1980:27; McGregor 1974:344,407; Gillespie 1976:115; Kidder and Guernsey 1919:50-51, 60, 70, 73; W. Smith 1973:121-122, 129, 146; Kent 1957; Kidder 1958:159, 179). The modern Hopi do weave in kivas (Kent 1940:46-52; Mindeleff 1891:118-136), with vertical looms suspended from ceiling beams and set into holes in wooden blocks located in the floor. Those loom holes at Long House in Mesa Verde National Park were set directly into the floor and are similar to those at Casa de Sueños (Cattanach 1980).

Feature 10 is cylindrical, 11 cm in diameter and 10 cm deep. The fill is kiva fill, subsoil mixed with charcoal and some root casts, and suggests that the holes were open when the kiva collapsed. Green floor plaster extends to a depth of 1.3 cm around the edge; the feature may have been dug into the floor after the initial construction and before the remodeling. Feature 11 is cylindrical, 10.5 cm and has the same fill as Feature 10.

### Wall Buttress

Feature 12 (Figures 17, 27, and 28) is a purely architectural feature designed to buttress the northeast wall under the northeast pilaster. It consists of two sandstone slabs in nearly vertical position; both are plastered over.

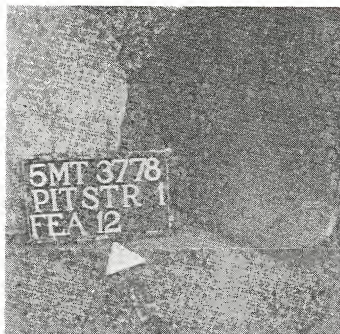


Figure 27: Photograph of Feature 12, wall buttress in kiva, Casa de Sueños.

The outer slab (Figure 28) was part of the kiva wall. Red plaster was on the edges of the slab, which was 40 cm long, 28 cm high, and 2.2 cm thick. The beige-green plaster was not present, implying that the slab and its buttressing effect were part of the remodeling episode. Behind this slab was a second slab (Figure 28) lying at a more acute angle. Between the two slabs was a jumbled mixture of red plaster, green sand, coarse Mancos shale, charcoal, fine roots, and root casts.

The surface of the second slab was covered with red plaster, implying that it, too, was part of the remodeling. It was 30 cm long, 27 cm high, and 2.3 cm thick. Apparently this slab slumped or was forced at an angle into the north wall of the kiva after it was set in place. The outer slab was installed later, apparently replacing the inner one when it could no longer support the weight of pilaster and roof.



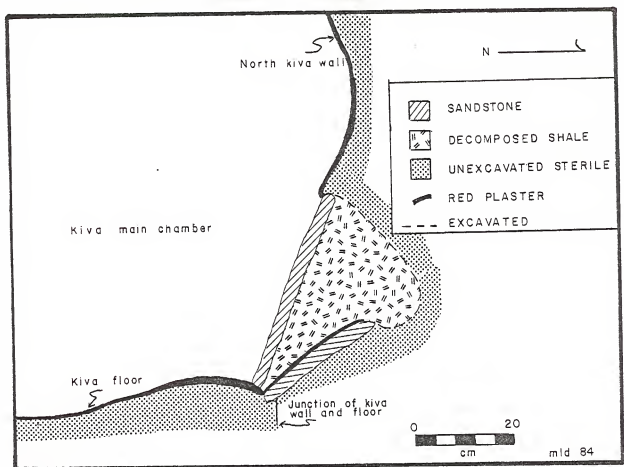


Figure 28: Diagram of Feature 12, wall buttress in kiva, Casa de Sueños.

Behind the inner slab was sterile C-horizon. There were no features, such as a cist or niche, as might have been expected behind such a wall feature. From the condition of the kiva in slumping, it seems that the slabs were designed to buttress the falling wall. It did help; this pilaster and wall were in good condition compared to the west side of the kiva.

#### Mealing Bins and Footrest

Features 13 and 14 are mealing bins immediately adjacent to the southwest wall of the kiva main chamber (Figures 17, 29, and 30). Feature 13 is a rectangular bin composed of three vertical sandstone



Figure 29: Top view of Features 13 and 14, mealing bins in kiva, Casa de Sueños.

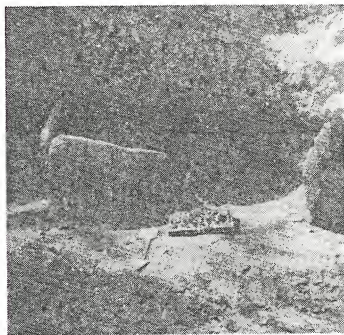


Figure 30: Side view of Features 13 and 14, mealing bins in kiva, Casa de Sueños.

slabs, one of which is shared with Feature 14. One side slab is missing (Figure 30). The metate was also missing, but an impression of its base was still clear within the mealing bin. Beneath the plaster was redeposited construction fill that had been used to build the slanting metate support. Surrounding the metate was a thin red plaster collar. There is a smooth sandstone slab at the base of the support slant (Figure 31). The surrounding slabs defining the bin and the horizontal slab at the metate base were coped with adobe and plaster. The perimeter slabs were also set into shallow (1.0 cm) grooves in the floor. Feature 13 is 55 cm long, 46 cm wide, and 32 cm deep.

Feature 14 is the second mealing bin and shares a common sandstone slab wall with Feature 13 (Figures 17, 29, 30, and 31). It is 69 cm long, 52 cm wide, and 38 cm deep. Like MB 13 described above, the metate had been removed. It was evident, however, that the metate had sloped downward toward Feature 13 (Figure 31). There was a smooth sandstone rock at the base (Figure 30). Surrounding the metate was a red adobe plaster collar, applied onto construction fill and a stream cobble foundation, which were apparently intended to hold the metate in its sloping position. A broken San Juan white ware bowl (PL 29, Table 14) was found on top of the smooth sandstone rock at the base of the feature. The perimeter slabs for Feature 14 were thin tabular sandstone set vertically into shallow (1.0 cm) floor grooves. They were coped with green, then red, floor plaster, with a fairly massive amount of adobe coping along the outside of the back slab (Figure 29).

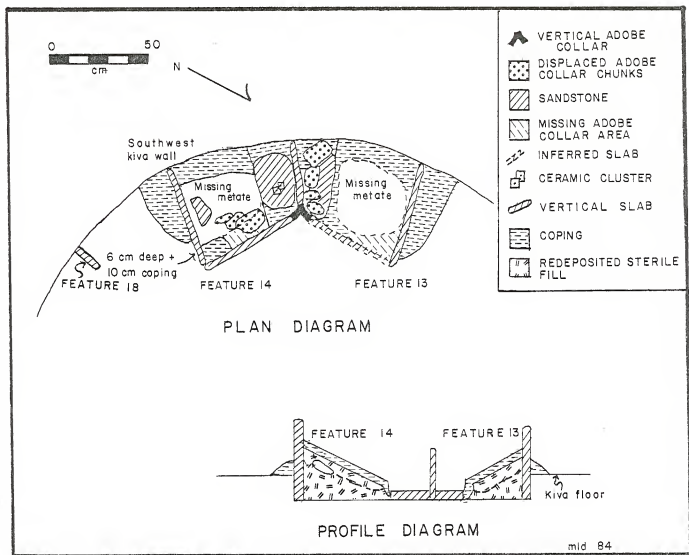


Figure 31: Plan view of Features 13 and 14, mealing bins in the kiva, Casa de Sueños.

The two mealing bins sloped toward each other so that the workers could converse during the task of preparing food. Both bins are situated to occupy minimal space in the kiva. The redeposited construction fill in both features has no cultural inclusions, suggesting that the bins were installed when the kiva was built. Metates were missing from both bins; they appeared to have been intentionally removed, perhaps in a hurry. Chunks of the adobe collars were broken off and scattered throughout each bin. Several metates were on the floor of the kiva main chamber, looking as if they had been thrown there during abandonment of the structure (Figure 32). This action may reflect an attempt to remove the metates as the kiva was burning, or perhaps as part of ritual abandonment of the kiva.

#### Footrest

Feature 18 is associated with Feature 14 (Figures 17 and 33). It is a rounded sandstone cobble, once used as a mano, set into the kiva floor and plastered into place against the southern wall. It is 14 cm long, 6 cm wide, and 13 cm above the floor, and is set 10 cm into the floor. It is 50 cm southeast of Feature 14. Feature 18 apparently served as a foot support or brace for the individual using the mealing bin, Feature 14.

#### Wall Niche

Feature 15 is the northern wall niche, set in line along the axis of symmetry with the hearth and vent shaft (Figure 17). It is 40 cm above the floor, 34 cm below the bench, and set into the plastered

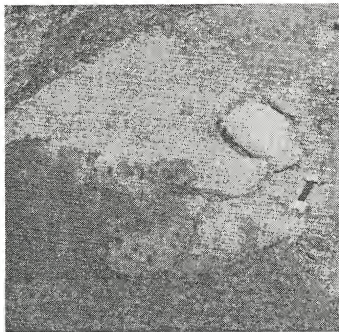


Figure 32: Metates on the floor of the kiva, Casa de Sueños.



Figure 33: Feature 18, footrest in kiva, Casa de Sueños. Legend board is wrong.

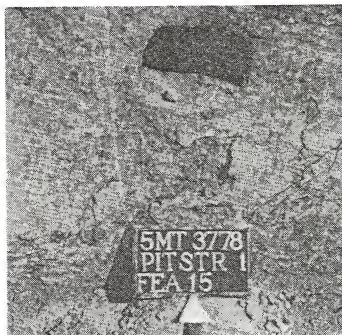


Figure 34: Feature 15, northern wall niche in kiva, Casa de Sueños.

wall area (Figure 34). The niche is 20.5 cm high, 15.5 cm wide, and 21.5 cm deep. It was originally rectangular in plan and profile, but with the collapse of the bench system and lower wall, part of the niche also collapsed so that the profile appeared triangular.

The niche was lined with red plaster on the bottom, walls, and apparently the top, because plaster was mixed with the fill. The plaster showed no evidence of having been burned. The fill in the niche was Stratum 3 kiva fill with some charcoal flecks, as in the rest of the kiva. There were no artifacts or other cultural associations in the niche.

#### Rock Concentration

Feature 16 is a rock concentration, either resulting from roof collapse, collapse of the pilasters on either side of the southern

recess, or as a part of ritual abandonment. The feature is 150 cm long, 135 cm wide, and 25 cm deep; it is confined to an area between the central hearth and the southern wall (Figure 35). There are at least 85 sandstone fragments scattered atop the floor. The rocks average 10 to 15 cm in diameter; many appear to be burned on the lower side.

The rocks are jumbled with no coursing or patterning observed. One metate was in the pile, apparently thrown in with the rest. The lower rocks were sunk or impressed into the floor plaster, suggesting the surface was wet when the rocks fell.

Beneath the feature and associated with the floor or just above it are a metate (above PL 36, Table 14), three manos (PLs 31, 32, and 40; Table 14), and a reconstructable corrugated ceramic jar (PL 34, Table 14). The vent cover, a sandstone slab (Figure 35), was also under the rock pile of Feature 16.

### Sipapus

Features 19 and 20 are sipapus, built at different times during the use-life of the kiva. They are adjacent to each other (Figures 36 and 37), are between the hearth and the northern wall niche on the axis of symmetry through the kiva (Figure 17). Each has similar fill.

Feature 19 is south of and adjacent to Feature 20 (Figures 17, 36, and 37), and is on the main axis of the kiva. Both sipapus are round in plan and cylindrical in profile. Feature 19 is 16 cm in diameter, 15 cm deep, and filled with red sand similar to that in the floor plaster. There is some slump in the southern side of the sipapu (Figure 36). The sides and bottom of the feature were defined by sterile C-horizon.



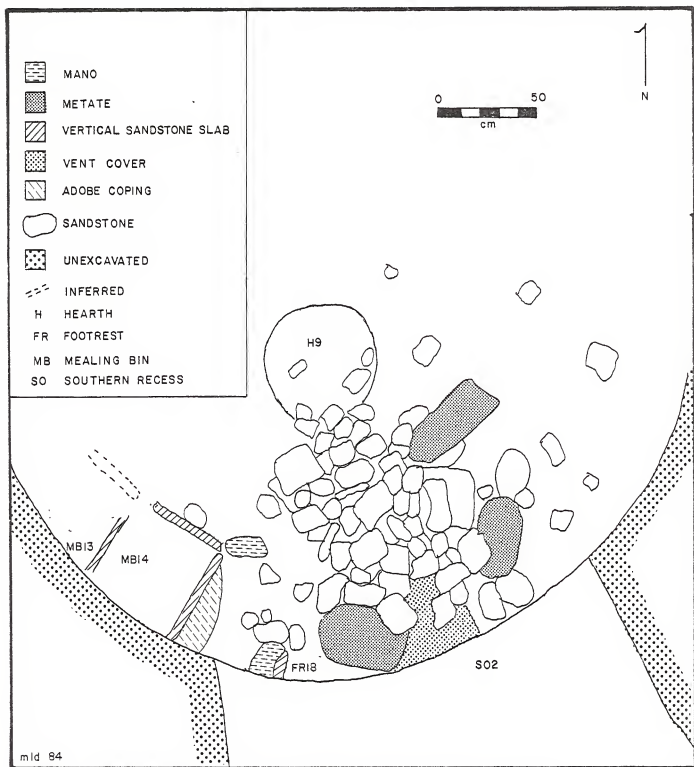


Figure 35: Diagram of Feature 15, rock pile in southern half of kiva, Casa de Sueños.

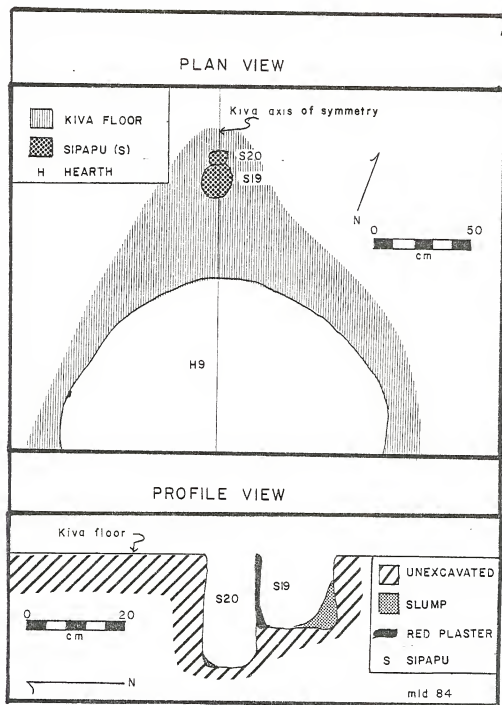


Figure 36: Diagrams of Features 19 and 20, sipapus in kiva, Casa de Sueños.

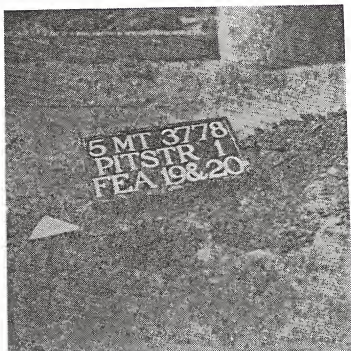


Figure 37: Features 19 and 20, sipapus in kiva, Casa de Sueños.

Feature 20 is 10.2 cm in diameter and 22.5 cm deep. The fill is red sandy clay; the sides and bottom were defined by sterile C-horizon soil. It was capped with a beige-green clay, similar to the first plaster; this may indicate that Feature 20 was the earliest sipapu. However, it was also filled with red sandy clay.

These 20 features are not uncommon in kivas; in fact, together they form part of the definition of a kiva in the early Pueblo III period (Morley 1908:601-603; Prudden 1918:9-13; Martín 1936:40-46; Brew 1946:203-214; Rohn 1977:251). The standard Mesa Verde Pueblo III kiva features (southern recess, vent system, ash pit, hearth, sipapu, and northern wall niche) are present. Other features, such as loom holes and the mealing bins are not uncommon, but are also not standard features in all kivas of the time period (Gillespie 1976).

Both weaving, which is done today by the Hopi in kivas (Kent 1940), and grinding corn could be ceremonial in purpose, and, thus, would fit into the general picture of a kiva as a ceremonial use room. However, given the nature of the associated room as a storage/nonhabitation room, the kiva may also have served as a habitation area as well as a ceremonial one. The artifacts associated with the kiva as point locations are primarily utilitarian, not ceremonial (Table 14), although that could also be the case if the kiva were ritually abandoned as well. Artifacts found in the fill, thus, from either the roof or the bench, are also primarily utilitarian.

#### PLAZA

The plaza area is the prehistoric ground surface east of the room and south between the room and kiva (Figure 8). The prehistoric surface was clearly definable from post-abandonment deposition for two reasons. First, the later deposition was brown while the prehistoric ground surface was light tan. Second, all wall fall was confined to the later deposition (Figure 38).

The prehistoric ground surface showed no preparation except for some possible use compaction. The surface had been heavily impacted by tree roots and rodent activity; there were depressions containing fill from the post-abandonment deposition. There were no features found in the plaza area.

Two reconstructable ceramic vessels were found on the plaza surface east of the room (Figure 39). Sherds were found over a 1 x 1 m square area. The ceramic type is Dolores Corrugated, and vessel form

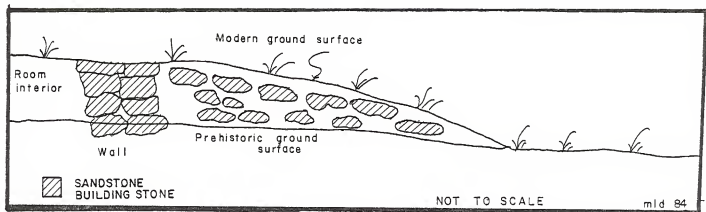


Figure 38: Sketch of stratigraphy of plaza area, Casa de Sueños.

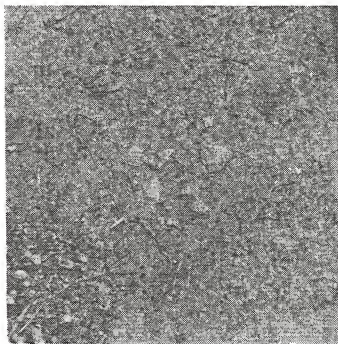


Figure 39: Portion of ceramic vessel in plaza area, east of room, Casa de Sueños.

is a jar. The sherds appear to be refuse rather than associated with an activity area.

### Artifacts

#### CERAMICS

The ceramics were analyzed according to the Dolores Archaeological Program ceramics analysis system (Blinman 1984a; Appendix A). Because of a lack of tree-ring dates, ceramics were used to date the site. Casa de Sueños was probably occupied during the period A.D. 1150 to A.D. 1200, but it could have been occupied from A.D. 1125 to A.D. 1200. It was probably not occupied until A.D. 1150 because of the presence of Dolores Corrugated, Mancos Black-on-white, and McElmo Black-on-white in the assemblage (see Appendix A for a more complete discussion).

Table 15 shows the ceramic types and functions recovered from Casa de Sueños. The greatest percentage of sherds is from utilitarian ware, shown by the numbers of gray and corrugated wares. Most of the sherds are from jars, 88 percent (926 out of 1,050 sherds), a utilitarian form. Only 11 percent (120 of 1,050) are from bowls. Four sherds (1%) are from other forms. Thus, the vessel forms and types may indicate the site use as functional, i.e., habitation and probably short-term habitation, because the decorated types often associated (Brew 1946; Martín 1936) with long term habitation are not common (Table 15). Alternatively, if the site were ritually abandoned, the decorated wares may have been removed.

The temper (Table 16) shows that the ceramics were produced locally in the Mesa Verde region and not traded from another locale.

Table 15. Ceramic type and vessel form from Casa de Sueños

Type	Room		Plaza		Kiva		Total
	No.	%	No.	%	No.	%	
Early Pueblo Gray	18	4.3	1	1.9	30	5.2	49
Late Pueblo Gray	34	8.2	2	3.2	81	14.0	117
Dolores Corrugated	10	2.4	5	9.3	27	4.6	42
Corrugated body sherds	269	64.6	44	81.5	334	57.6	647
Mancos Black-on-white	3	0.7			3	0.5	6
McElmo Black-on-white	7	1.7			16	2.8	23
Painted White	1	0.2			1	0.2	2
Polished White	6	1.4			7	1.2	13
Sherd White	44	10.6	1	1.9	61	10.5	106
Early Pueblo White	1	0.2					1
Pueblo II White	1	0.2	1	1.9			2
Pueblo III White	20	4.8			15	2.6	35
Unclassifiable White					4	0.7	4
Late Pueblo White					1	0.2	1
Totals	416		54		580		1,050
Vessel Form							
Grayware jar	332		52		472		856
Whiteware bowl	51				69		120
Whiteware jar	31		2		37		70
Whiteware other	2				2		4
Totals	416		54		580		1,050

Table 16. Ceramic temper from Casa de Sueños

Type temper	Room		Plaza		Kiva		Total
	No.	%	No.	%	No.	%	
Grayware							
Indeterminate	1	0.3			3	0.6	4
Andesite-diorite	288	86.7	50	96.1	258	54.6	596
Sherd, andesite- diorite	33	9.9	2	3.8	46	9.7	81
Conglomerate	5	1.5					5
Dakota sandstone	1	0.3					1
Sherd	3	0.9			96	20.3	99
Sand, andesite- diorite	1	0.3					1
San Juan crushed rock					67	14.1	67
Sherd and San Juan crushed rock					1	0.2	1
Sherd, conglomerate					1	0.2	1
<hr/>							
Totals	332		52		472		856
<hr/>							
Whiteware							
Indeterminate	3	3.5			4	3.7	7
Andesite-diorite	3	3.5			4	3.7	7
Sherd, andesite- diorite	46	54.7			44	40.7	90
Sand-quartz	1	1.1					1
Sherd	28	33.3	2	100.0	41	37.9	71
Sherd, conglomerate	1	1.1					1
Sand, andesite- diorite	1	1.1					1
Sherd, andesite- diorite, sand	1	1.1			9	8.3	10
Sherd-quartz, sand					1	0.9	1
San Juan crushed rock					1	0.9	1
Sherd, San Juan crushed rock					4	3.7	4
<hr/>							
Totals	84		2		108		194



Most of the ceramics are tempered with andesite-diorite, a crushed igneous rock, or with andesite-diorite in combination with other tempers. Andesite-diorite was available and used locally, although it was available throughout the area.

#### LITHICS

Lithics were analyzed according to the Dolores Archaeological Program system (Phagan 1982). Flaked lithics were not common in comparison to ceramics; 49 were collected from the entire site. Table 17 shows the morphological-functional types from Casa de Suenos. More than 50 percent of the flaked lithics are low input items (core, utilized flakes, cobble tool, and hammerstone--55.1%); i.e., they required little manufacturing time or skill. Table 17 shows the morphological distribution of the flaked lithics.

Flaked lithics were primarily made of local material (Table 18). Six (12.2%) were from nonlocal material (jasper, obsidian, Brushy Basin chert, Brushy Basin siltstone), and only two of these were found inside a structure (Table 18).

The grain size was primarily very fine (.125 mm); 27 of 40 artifacts were in this category. Ten artifacts were fine-grained (.125 mm to .25 mm), and twelve were microscopic (microcrystalline materials). Table 19 shows the dorsal face evaluation, which is also an energy input indicator.

SPSS CONDESCRIPTIVE (Nie et al 1975:181-193) for weight was also run on flaked lithics. Minimum weight was 1 gr; maximum was 2900 gr. The mean was 95.2 gr with a standard deviation of 415.6.

Table 17. Morphology of flaked lithics from Casa de Sueños

Type	Surface collection		Room		Kiva		Plaza		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Unused core	2	11.1							2	4.1
Thick biface	2	11.1			2	8.7			4	8.2
Thick uniface	1	5.5	1	14.3	1	4.3			3	6.1
Frag uniface	1	5.5							1	2.0
Unworked-utilized flake	10	55.5	2	28.6	11	47.8			23	47.0
Projectile point	1	5.5	1	14.3					2	4.1
Graver	1	5.5							1	2.0
Thin biface			1	14.3	4	17.4	1	100	6	12.1
Denticulate			1	14.3	1	4.3			2	4.1
Frag projectile			1	14.3					1	2.0
Cobble tool					1	4.3			1	2.0
Notch					1	4.3			1	2.0
Flaked axe					1	4.3			1	2.0
Hammerstone					1	4.3			1	2.0
Totals	18		7		23		1		49	

Table 18. Lithic material of flaked lithics from Casa de Sueños

Material	Surface collection		Room		Kiva		Plaza		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Quartzite	1				1				2	
Morrison quartzite	6		1		14				21	
Chert	1								1	
River cobble	2		1		2				5	
Brushy Basin chert*	1								1	
Jasper*	3								3	
Burro Canyon quartzite	3		2		2				7	
Burro Canyon chert	1		1				1	100	3	
Obsidian*			1						1	
Brushy Basin siltstone*			1		1				2	
Morrison chert					3				3	
Totals	18		7		23		1		49	

\*Non-local materials.

Table 19. Dorsal face evaluation of flaked lithics  
from Casa de Sueños

Dorsal face treatment	Number	Percentage	
Core	3	6.1	Low input
Unworked with cortex	18	36.7	
Unworked, no cortex	18	36.7	
Thinned with cortex	2	4.1	High input
Primarily flattened	1	2.0	
Secondarily flattened	3	6.1	
Well shaped	4	8.2	
Totals	49	100.0	

Table 20. Morphology of nonflaked lithics from Casa de Sueños

Type	Room		Kiva		Plaza		Total	
	No.	%	No.	%	No.	%	No.	%
Hammerstone	1	25.0	3	9.7			4	10.3
Axe	3	75.0	2	6.5			5	12.8
Maul					1	50.0	1	2.6
Grinding stone			4	12.9	1	50.0	5	12.8
Shaped stone slab			4	12.9			4	10.3
2-handed mano			9	29.0			9	23.1
Mano, NFS*			4	12.9			4	10.3
Slab metate			5	16.1			5	12.8
Palette			1	3.2			1	2.6
Minimally altered			1	3.2			1	2.6
Totals	4		33		2		39	

\*Not further specified.

Nonflaked lithic tools numbered 39. Table 20 shows the morphological use classification of these artifacts. The few numbers (4) from the room, and the types (3 axes, 1 hammerstone) further define the room as nonhabitation. However, the kiva has the bulk of the habitation-associated artifacts (Table 20), wither on the bench, floor, or from the fill, and thus, the roof.

Two shaped stone slabs (Table 20) are pot lids. They were found underneath pots which had turned upside down in the fill. One other shaped stone slab was a buttress for the east pilaster, and another was apparently used as a palette since there was paint pigment present.

One definable palette was point located on the bench. Five other nonflaked lithics were also used as palettes. Three of these had previously been used as grinding stones, and two had originally been manos. The presence of the palettes may indicate the ceremonial nature of the kivas, or it may reflect pottery painting or some other unclear activity, domestic or ceremonial.

Lithic debitage was also analyzed (Table 21). A total of 106 flakes and flake fragments were located over the entire site, with 5 of these nonlocal items. This low figure, slightly over twice as many as flaked lithics, probably indicates little or no lithic manufacture on the site.

#### BULK SOIL AND PLANT REMAINS

Eleven soil samples were taken from various features within the kiva. The results of analysis for wood, seeds, and other plant materials are shown in Table 22 and Appendix B. Corn was the primary cultigen, but purslane, goosefoot, and ground cherry seeds are not only

Table 21. Analysis of lithic debitage from Casa de Sueños

	General site			Room			Kiva			Plaza			Total		
	No.	%	Mean wt.	No.	%	Mean wt.	No.	%	Mean wt.	No.	%	Mean wt.	No.	%	Mean wt.
Flakes/flake fragments															
Grain size															
Medium	1	2.5	46.0	--	--	--	1	3.7	3.0	--	--	--	2	1.9	24.5
Fine	2	5.0	9.0	4	10.8	1.0	3	11.1	23.3	--	--	--	9	8.5	10.2
Very fine	16	40.0	5.6	32	86.5	1.3	23	85.2	8.3	--	--	--	71	67.0	4.5
Microscopic	21	52.5	1.9	1	2.7	11.0	--	--	--	2	100.0	1.0	24	22.6	2.3
Total	40	--	4.8	37	--	1.5	27	--	9.8	2	--	1.0	106	--	4.8
Items with cortex	12	30.0	--	5	13.5	--	8	29.6	--	--	--	--	25	23.6	--
Whole flakes	27	67.5	--	21	65.6	--	26	96.3	--	2	100.0	--	76	71.7	--
Non-local items	4	10.0	--	1	2.7	--	--	--	--	--	--	--	5	4.7	--
Angular debris	6	--	13.3	1	--	1.0	2	--	16.0	--	--	--	9	--	12.0

Table 22. Analysis of plant remains from bulk soils from the kiva at Casa de Suenos

Provenience Bulk soil no.	Wood										Fruits/Seeds								Cultigen	Other	
	Pine wood ( <i>Pinus</i> sp.)	Sagebrush/robust shrub ( <i>Artemisia</i> sp./ <i>Cercocarpus</i> sp.)	Cottonwood ( <i>Populus</i> sp.)	Conifer ( <i>Coniferaceae</i> )	Beech family ( <i>Fagaceae</i> )	Mountain mahogany ( <i>Cercocarpus montanus</i> )	Juniper ( <i>Juniperus</i> sp.)	Gambel oak ( <i>Quercus gambelii</i> )	Pison wood	Indeterminate	Goosefoot ( <i>Chenopodium</i> sp.) fruit	Sunflower ( <i>Helianthus</i> sp.) fruit	Chenopium* ( <i>Chenopodium</i> sp. or <i>Amaranthus</i> sp.)	Purslane ( <i>Portulaca</i> sp.) seeds	Globe willow ( <i>Salicaceae</i> sp.) seeds	Deciduous seeds	Ground cherry ( <i>Physalis</i> sp.) seeds	Indeterminate seeds	Corn ( <i>Zea mays</i> )	Pison needle fragment	Deciduous leaves
Central hearth Feat. 9, BS 11	<.1gmCH	<.1gmCH	<.3gmCH								24CH	1CH	11CH				2CH	14CH			24CH
Room hole Feat. 10, BS 6				<.1gmCH <.1gmCH	<.1gmCH						74CH									1CH	
Room hole Feat. 11, BS 7	<.1gmCH	<.1gmCH									34CH										
Hall niche Feat. 15, BS 8	<.1gmCH			<.1gmCH	<.1gmCH						64CH			34CH				1CH			
Ash pit Feat. 17, BS 9			<.1gmCH	<.1gmCH	<.1gmCH	<.1gmCH			<.2gmCH	<.1gmCH			54CH				64CH	1CH	8CH		
Ash pit Feat. 17, BS10	<.1gmCH	<.1gmCH		<.1gmCH			<.3gmCH	<.1gmCH			2CH						42CH	8CH	1CH		
Slipway Feat. 19, BS12	<.1gmCH						<.1gmCH				1CH				14CH						1CH
Slipway Feat. 20, BS13		<.1gmCH	<.1gmCH	<.1gmCH							64CH			34CH						3CH	
Pot Interior BS 1	<.1gmCH				<.1gmCH					<.1gmCH			14CH			24CH		1CH			
Pot Interior BS 2	<.1gmCH										274CH 3CH		14CH			13CH	2CH	1CH 14CH			
Upper control BS 5	<.1gmCH			<.1gmCH							24CH				14CH					14CH	

\*Chenopium refers to a category of seeds/fruits difficult to distinguish between; the category consists of goosefoot (*Chenopodium* sp.) and pigweed (*Amaranthus* sp.).

CH = charred

NCH = noncharred

edible but may represent plants encouraged, if not actually cultivated, by the Anasazi. The contents of a pot (Bulk Soil 1 and 2) were charred Dicotyledoneae seeds that could only be identified as coming from a broad-leaf or deciduous plant. These seeds had been placed in the pot, based on the location of the ceramic on the bench and the absence of regular fill in the pot.

One roof beam was recovered and identified as juniper (Juniperus sp.). It was too rotted and fragmentary to use for tree-ring analysis. One of the sticks used in the construction of the vent tunnel was identified as juniper also (Juniperus sp.).

#### NONHUMAN BONE

Several bones were recovered from the kiva; all were nonhuman. A brief analysis of kind, condition, and possible use was conducted (Sarah Neusius, Dolores Archaeological Program, 1984).

In the main chamber fill were two large mammal long bone fragments, a possibly modified large mammal sliver (undetermined), a bird long bone fragment, and an Artiodactyla (probable Antilocapra americana) incisor. All were seriously weathered by undetermined causes, but perhaps due to soil elements.

On the floor of the kiva main chamber was an Artiodactyla metapodial distal end modified into an awl. The surface was eroded, either from possible dog activity or from weathering.

From the hearth came a burned long bone shaft fragment from a medium to large mammal, not further identifiable. The ash pit contained the



patella of a medium mammal, the skull of Cynomys or Neotoma, and a possible sternum piece of a small to medium mammal. These bones may reflect a food source for the kiva inhabitants.

Most of the bones were weathered in a way that is not usual in buried materials (Sarah Neusius, Dolores Archaeological Program, personal communication, 1984), but in a way not determined. The floor artifact, an awl, showed some weathering, but was identifiable as to species and use. The other possibly modified bone was badly weathered. Both modified bones appear to be weaving tools, based on comparison with similar tools from the area (Rohn 1971; Swannack 1969), and, as such, further suggest that Features 10 and 11 were loom holes.

#### Summary and Conclusions

Casa de Sueños, a single masonry surface room and associated subterranean kiva, was used for limited habitation and(or) ceremonial purposes. The room possibly was used as a storage room or for some other limited function, rather than a habitation space, while the kiva had both habitation and ceremonial features. Dates of occupation, based on ceramic cross-dating, were from A.D. 1150 to A.D. 1200.

The room contained four postholes and a central hearth. The postholes were confined to the southwest quadrant of the room and could not have contained posts serving as the primary roof supports, although some roof support may have been provided. The central hearth had a low input of labor to build and had a low maintenance upkeep. In fact, the hearth appeared to have been used only briefly. During later use of the room, a posthole was placed through the hearth, perhaps to help support a sagging roof.

The room measured 2.3 m north-south and 2.9 m east-west for an interior area of  $6.67 \text{ m}^2$ . The north and east walls were composite masonry of shaped and unshaped sandstone and river cobbles while the south and west walls were simple masonry of the same materials. From the amount of wall fall, the room appeared to have been about 2 m tall with the walls providing the primary roof support. The corners of the room were rounded. The floor was not prepared, but was identified by being use-compacted.

Artifacts from the room tend to support the nonhabitation use. Three ground stone axes and at least one corrugated ceramic jar were associated with the floor and seem to have been stored in the room. Pollen analysis has been used to determine storage rooms as differentiated from habitation rooms (Hill 1970; Longacre 1966), but there were no appropriate features for pollen samples to be taken in the room. Thus, its designation as a storage room is from features, or their absence, and associated artifacts, or their absence.

The kiva is aligned with the surface room along a north-south axis. The kiva's design is early Pueblo III, and it is 5.6 m north-south and 4.8 m east-west, including the southern recess and bench.

However, the lack of stone in constructing the kiva apparently shows the limited use of the site in that an investment of time to construct a masonry kiva would not have been repaid by the use of the kiva. The remodeling episode also points to limited and sporadic use, especially since a second sipapu was constructed. Presumably the second sipapu was to reactivate the kiva as a spiritual place after a period of nonuse, or it may indicate reuse by a different group.

The kiva contained both ceremonial features (sipapus, wall niche, hearth, southern recess) and habitation features (meal bins, loom holes). This configuration is not common, especially in early Pueblo III kivas, but it is not unknown (Gillespie 1976). It seems to relate, in the case of Casa de Sueños, to sporadic occupation of the site, so that building surface rooms for habitation was less important than building and maintaining the kiva. Nevertheless, occupation lasted long enough for the pursuit of some domestic activities, such as grinding corn and weaving, although either activity could have been for ceremonial rather than secular reasons.

Therefore, it seems that Casa de Sueños was occupied for a short-term, sporadic habitation and(or) ceremonial use. The time period (A.D. 1150-1200) is contemporaneous with a later occupation at the Escalante Site (Hallisi 1979), and the use of Casa de Sueños may be closely related to the Escalante occupation. Chapter 4 will discuss the local community during early Pueblo III times, and other reasons for the existence of Casa de Sueños.

## CHAPTER 4

### SUMMARY AND CONCLUSIONS

The sites, 5MT3777 and Casa de Sueños, are located in the Mesa Verde Region of the Northern San Juan Anasazi area (Kane 1983a:19; Gillespie 1976:14). This location implies architecture and artifacts are related within the area, showing consistent manufacturing styles and methods. As can be seen in Figure 40, the area includes more than the Mesa Verde proper, so that the term "Mesa Verde" refers to the entire region.

Site 5MT3777 and Casa de Sueños are located in an area of heavy prehistoric utilization. There are 257 documented prehistoric sites in the surrounding 9 square miles; however, only 88 fall into the time periods during which the 2 sites were occupied. Distance, also, is a factor of use, and fewer than 20 documented sites are within the immediate vicinity of the sites. Figure 3 shows the distribution of the prehistoric sites in the nine square miles surrounding Site 5MT3777 and Casa de Sueños.

Because Site 5MT3777 could have been utilized from A.D. 900 to A.D. 1200, this site could be assigned to any of the community patterns discussed below, but it is vague as to which exact one it fits. The site was a terrace forming a small garden plot. It could have been built and used by the inhabitants of the other sites on the hillside where it was located. The primary use may have been to control erosion from the hillside, and only secondarily used for cropping.

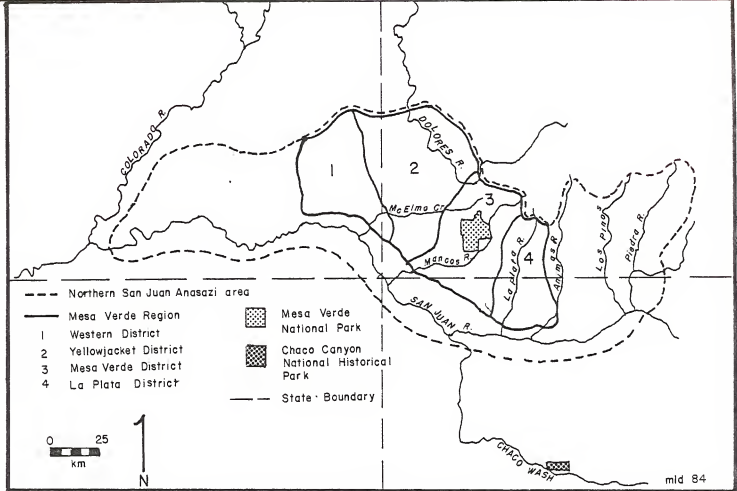


Figure 40: Diagram of the Mesa Verde Region of the Northern San Juan Anasazi area. Adapted from Gillespie 1976:14; Kane 1983a:19).

Casa de Sueños was a single masonry surface room associated with kiva, probably built and occupied between A.D. 1150 and A.D. 1200. It is part of a Pueblo III community located on the hill where the Escalante Site (5MT2149) is located (Figure 41). This community appears to be centered around the Escalante Site, but could also be part of a larger community including a number of sites to the southeast (Figure 41).

The Escalante Site (Hallisi 1979; White and Breternitz 1979) is a Pueblo III pueblo habitation on the hilltop overlooking the Dolores River to the north. In 1975 and 1976, the site was excavated and stabilized under the sponsorship of the Bureau of Land Management as part of a Bicentennial project tracing the Dominguez-Escalante expedition of

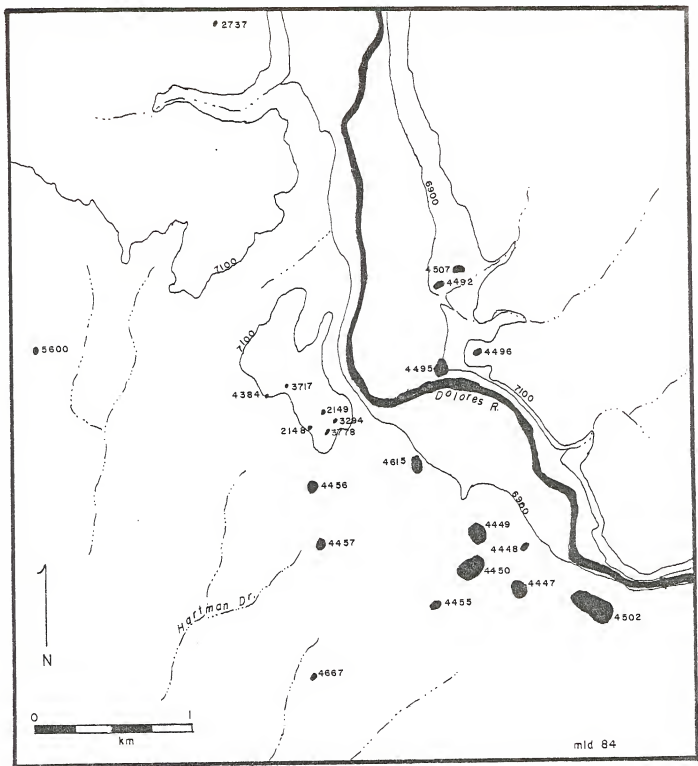


Figure 41: Map of area around Casa de Sueños and the Escalante Site, showing the location of other known Pueblo III sites.

1776-1777 (see Chapter 1, Figure 2). Excavations showed three occupations of the site (Hallisi 1979:397): (1) a Chaco Canyon-influenced original construction and occupation; (2) reuse of the original rooms and some rebuilding of Mesa Verde style architecture; (3) a limited reoccupation, again indicative of Mesa Verde architecture.

The original construction of the Escalante Site showed an influence from Chaco Canyon, particularly in the architecture. Hallisi (1979:399) suggests that a colony of males from Chaco Canyon built the site and intermarried with local Mesa Verde females. The dates for this occupation are A.D. 1075 to A.D. 1150 (Hallisi 1979:398), based on tree ring dates and ceramic cross-dating. The architecture is Chacoan, but the ceramics are Mesa Verdean (Hallisi 1979:399), suggesting males (from Chaco) building and women (from Mesa Verde) manufacturing ceramics in the accepted division of labor among the Anasazi. There are few trade objects in the assemblage from the first occupation at the Escalante Site (Hallisi 1979:399). Another alternative is that, while the Escalante Site architecture may be Chacoan-influenced, the site may not represent a Chacoan outlier but a local McElmo Phase site (Vivian and Mathews 1965:108-110). Whether or not the Escalante Site is a Chaco outlier, the site apparently served as a central focus for the other sites on the hillside (Figure 41).

Casa de Sueños was probably occupied during the second occupation at the Escalante Site. The use/habitation seems to be limited and sporadic in nature. Its relationship to the Escalante Site or other sites in the vicinity is not clear. It would seem, however, that

there was some relationship, especially with the known occupation of Escalante during the period of occupation at Casa de Sueños. The kiva, by its construction as a kiva and by its features, does have religious implications. The northern wall niche and sipapus indicate some religious purpose behind its construction.

The Curator Site, 5MT3294, has only been recorded through survey, but it appears to be an early Pueblo III site based on ceramics and architecture observed. It is smaller than the Escalante Site, perhaps five rooms opposed to over thirty, but it has a kiva, trash midden, and possible tower. The Curator Site is approximately 75 m northeast of Casa de Sueños.

The Dominguez Site, 5MT2148, was excavated (Reed 1979) and stabilized (White and Breternitz 1979) in 1976. The site has four rooms associated with a kiva. It was occupied around A.D. 1123 (Reed 1979:35), making it contemporaneous with the first occupation at the Escalante Site, but earlier than the construction of Casa de Sueños. One of the rooms, Room 2, contained three burials, an adult female, an infant, and a child. The adult was associated with the infant, and this burial contained a number of grave goods, indicating a high status burial (Reed 1979:101). All three burials were placed in the room after it was abandoned, and may represent activity from the Escalante Site, or perhaps from Casa de Sueños. The kiva at the Dominguez Site was dirt/plaster lined as was the kiva at Casa de Sueños. However, there were four pilasters instead of six, no southern recess, and fewer floor features (Reed 1979:27-34). Weaving



did seem to occur in the Dominguez Site kiva (Reed 1979:39-40), based on the bone weaving tools found in it; this activity was also inferred from the kiva at Casa de Sueños (Chapter 3).

Site 4384 on the west edge of the hillside (Figure 41) is a multi-component site according to the site report (BLM site files), with a Basketmaker III and a Pueblo III component. These dates are tentative and based on survey observations of ceramics and architecture. The site consists of a rubble mound, five circular depressions, and a trash midden. The rubble mound is 6 m by 6.5 m, indicating perhaps two or three rooms. The circular depressions may represent Basketmaker III pithouses, according to the survey record.

Site 5MT3717 is a small Pueblo III ceramic scatter of Mesa Verde Black-on-white. It indicates a limited activity site, and is apparently later than the other sites on the hillside. Two unrecorded sites on private land lie about 50 m south of Casa de Sueños at the foot of the hill. They are rubble mounds with kiva depressions, but there are no data for assigning a date of occupation.

The immediate community, then, on the Escalante hillside, is composed of the Escalante and Dominguez sites, Casa de Sueños, Site 5MT3294, Site 5MT3717, Site 5MT4384, and Site 5MT3777. The Dominguez Site, Casa de Sueños, the Escalante Site, and possibly Site 5MT3777 show an overlap, if not contemporaneity, in occupation. The Escalante Site seems to be the dominant site for this immediate community; more elaborate construction, greater size, and position on the hilltop indicate a position of importance.

If the Escalante Site is a Chacoan outlier with trade relationships to the Chacoan area in New Mexico, then it could have been the dominant site, not only for the hillside, but for a larger area. Another community exists nearby to the southeast (Figure 41), and appears to be centered around Site 5MT4450, the Reservoir Site, which is larger and perhaps more elaborate than the Escalante Site. Other sites in the immediate vicinity of the Reservoir Site include Site 5MT4447, Site 5MT4448, Site 5MT4449, Site 5MT4502, and perhaps Site 5MT4455.

Site 5MT4450, the Reservoir Site, is known only from the survey record (BLM site files) and from a report by Fewkes (1919). It is a complex, multi-component site with two large rubble mounds, several kiva depressions, and one large depression, possibly a great kiva. It has not been investigated beyond surface recording. The dates of occupation suggested by survey observations are from Basketmaker III to Pueblo III.

Site 5MT4447, the Emerson Site, is a large rubble mound, kiva depression, small additional roomblock, and a trash mound south of the site. The dates of occupation are postulated from Pueblo I to Pueblo II based on survey data. Site 5MT4448 is described on the site form as a field house with a depression in the center of the rubble. From this description it seems similar to Casa de Sueños. The suggested date of occupation is Pueblo II. Site 5MT4449 is a unit-type pueblo with a rubble mound arc, at least one kiva depression, and a trash midden. The suggested date of occupation is Pueblo II. Site 5MT4455

is a rubble mound with other unidentified features and an unknown date. Site 5MT4502 is a multicomponent habitation site with a rubble mound, kiva depression, and trash midden. The dates suggested by survey observations are Pueblo II to Pueblo III.

This second community has not been examined except by survey, and the suggested occupation dates have not been verified by excavation data. This group of sites may represent another, earlier community, perhaps centered around the Reservoir Site. It is possible that these sites extend their habitation/use into the early Pueblo III period and are a part of a larger community which includes the Escalante hillside locality.

If the latter is the case, then there appears to be a large community on the south rim of the Dolores River. The possible existence of a great kiva at the Reservoir Site indicates it may have been the center of this community. Determination of this possibility will have to await further investigations, but the proposal is testable.

Relationships with Chaco Canyon could also be tested with future investigations, particularly on Site 5MT4450 and Site 5MT4448. The Chacoan influence at the Escalante Site is primarily limited to architecture, and may, as Hallisi (1979:396) suggests, show a colony of Chaco males coming into the area during a period of abandonment in Chaco Canyon. It could also be a function of the Escalante Site as a secondary site to a larger Chaco outlier, such as the Reservoir Site.

The second and third occupations at the Escalante Site should also be compared to later occupations in these other sites, in light of

community relationships. For example, the Dominguez Site was apparently occupied during the first Escalante occupation (A.D. 1075 to pre 1150), but was abandoned before the second Escalante occupation. Casa de Sueños was apparently inhabited during the second Escalante occupation (A.D. 1150 to A.D. 1200), but was abandoned before the third Escalante occupation.

In conclusion, the occupation of the area surrounding Casa de Sueños appears to be that of a community, with small sites relating to the larger ones. A pattern of similar community clusters is beginning to emerge as more data on the later periods from the entire Mesa Verde Region are collected. The area around the Lowry Site, for example, has been recently investigated and shows a similar pattern (Arthur H. Rohn, personal communication, 1984). The Goodman Point Site (5MT604) has a number of small sites in its immediate vicinity (Gould 1982; BLM site files). A pattern of larger habitation sites, such as the Escalante Site, Lowry, Site 5MT4450, and Sand Canyon, with both external (e.g., Chacoan) and internal (e.g., Mesa Verdean) features, and surrounded by smaller habitation or ritual sites (e.g., Casa de Sueños), is emerging. This hypothesis of settlement patterns, especially in the early Pueblo III period, is testable by further investigations of survey to locate the smaller peripheral sites; and by excavation to determine dates of occupation and relationships between the smaller and larger sites, among the larger sites, and between the sites from the Mesa Verde Region with those outside it.

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APPENDIX A

CERAMICS FROM SITES 5MT3777 and 5MT3778, CASA DE SUEÑOS

by

C. Dean Wilson

## APPENDIX A

### CERAMICS FROM SITES 5MT3777 and 5MT3778, CASA DE SUEÑOS

#### Introduction

This report discusses the results of the analysis of ceramics recovered from two excavated sites (5MT3777 and 5MT3778, Casa de Sueños) previously described. During this analysis, data which would provide information concerning the approximate time of occupation of these sites, the area of origin of the ceramics, and the vessel form and use, were recorded.

#### Analysis System

The analysis system presently used by the Dolores Archaeological Program (Blinman 1984a) was employed. The use of this system may also allow for the comparison of ceramic data recorded during the present study to that recorded for ceramics from nearby contemporaneous sites investigated by the Dolores Archaeological Program. Data recorded for all ceramics include that concerning their archeological provenience, attributes providing basic descriptions, typological assignments, and number and weight counts for the recorded attributes. Ceramic attributes recorded include temper type, surface manipulation, surface compaction, surface cover, paint type, paint color, vessel form, presence of rim sherds, and modified items. Based on the presence of various characteristics, ceramics are also placed into particular traditional types which include cultural category (representing the basic area of origin, and usually defined by associated temper), ware (which



reflects manufacturing techniques and includes white, gray, and red wares), and types (representing temporally sensitive stylistic or technological manipulations). Traditional type represents a hierarchical assignment where a particular sherd is first placed into a particular culture category, then ware, and finally type. Count and weight were also recorded for all ceramics from a particular provenience and containing a particular combination of attribute and typological classes. While a detailed description of the analysis and coding system is not presented here, a very detailed documentation of this system is presented in the Dolores Archaeological Program ceramic manual (Blinman 1984a).

Data codes concerning both attribute and typological information were recorded on standardized forms, and entered into a computer. This information was subsequently manipulated in order to provide information concerning temporal, spatial, and functional significance. This information will be presented and evaluated in the following discussion concerning the 84 sherds recovered from 5MT3777 and 1,050 sherds from Casa de Sueños.

#### Ceramic Types and Dating

The overwhelming majority of the ceramic types analyzed from these sites represents Mesa Verde traditional ceramics. As styles and forms utilized to place ceramics into particular types change through time, the presence of particular information concerning the date of occupation of a particular site also changes. Several sources concerning Mesa Verde ceramic types were utilized to identify and determine

associated dates of the ceramics present (Abel 1955; Rohn 1977; Breternitz et al 1974; Blinman 1984). Both formal and group types were recorded. Group types are given to ceramics which cannot be placed into a formal Mesa Verde type, but whose presence or relative proportion may contribute in the determination of the temporal period represented. A brief description and discussion of ceramic types analyzed will be presented. Next the distribution and proportion of ceramics belonging to various types will be discussed. Based on this data, an attempt will be made to determine the temporal period during which the two sites were occupied.

All ceramics from the two sites represent either gray or white wares. Both ware groups were fired in a neutral or reducing atmosphere, and exhibit white to gray surfaces. Graywares represent ceramics containing no evidence of having been painted or polished; they are thought to have served generally as utility or culinary wares. Graywares are usually placed into a particular type on the basis of surface manipulation, such as the presence of smoothed plain surfaces or the types of coiling exhibited. Sherds containing evidence of either having been painted or polished are classified as whitewares. Whitewares may be placed into a particular type on the basis of distinctive surface treatments and design styles known to be temporally sensitive.

Table 1 lists the formal and grouped grayware types recorded during the analysis of sites 5MT3777 and 5MT3778. Basic description and postulated temporal duration of these types are also presented. As

most dating arguments of these sites are based on the presence of three types (Dolores Corrugated, Mancos Black-on-white, and McElmo Black-on-white), these types will be described and discussed separately.

Corrugated rim sherds are placed into different types on the basis of rim eversion, as there appears to have been a gradual increase in the amount of rim eversion through time. The various corrugated types which have been previously described include Mancos Corrugated (exhibiting a rim eversion from 0 to 35 degrees), Dolores Corrugated (exhibiting a rim eversion from 35 to 50 degrees), and Mesa Verde Corrugated (exhibiting a rim eversion greater than 50 degrees) (Lucius and Wilson 1981a; 1981b; Wilson and Waterworth 1982; Blinman 1984b).

Table 1. Types recorded during analysis of ceramics  
from sites 5MT3777 and 5MT3778

Type	5MT3777		5MT3778	
	No.	Percent	No.	Percent
Chapin Gray	1	1.2		
Gray body sherds	14	16.6	57	5.4
Late Pueblo Gray	4	4.8	118	11.2
Corrugated body sherds	33	39.3	647	61.6
Unclassifiable Gray	2	2.4		
Dolores Corrugated			42	4.0
Mancos Black-on-white	8	9.5	8	0.8
McElmo Black-on-white			58	5.5
Painted White			2	0.2
Polished White	2	2.4	7	0.7
Sherd White	20	23.8	107	10.2
Unclassified White			4	0.4
Totals	84		1050	

All the corrugated rim sherds recovered from both sites analyzed exhibit rim eversions within the range of Dolores Corrugated although a wide range of variation in the treatment of the corrugations is represented. The temporal range of this type in significant proportion is probably from A.D. 1050 to A.D. 1200.

Mancos and McElmo represent the two black-on-white types recorded from these sites. Differences noted in the surface and stylistic treatment are utilized to distinguish the types. While some workers have divided the two types on the basis of paint type (often placing those with mineral paint into Mancos Black-on-white and those with organic paint into McElmo Black-on-white), this distinction appears often to be spatial rather than temporal, and both paint types were employed over much of the Mesa Verde region throughout the late Pueblo II and early Pueblo III periods. The type of paint represented by sherds placed into these types does, however, represent one of the attributes recorded. While many of the same designs (hatchures, triangles, checkerboards, and parallel lines) are present in both types the layouts are often different. Mancos Black-on-white is often characterized by bold all over layouts, while McElmo Black-on-white is often characterized by banded layouts.

Differences in the general form of these types also exist. McElmo Black-on-white often has thicker wares, and exhibits a higher degree of polish. The rims of Mancos Black-on-white are normally tapered and solidly painted, while those of McElmo Black-on-white are usually flat and often ticked.

Both of the types are fairly similar, often difficult to distinguish, and overlap temporally. However, they have different temporal spans, and their relative proportions in an assemblage are useful in determining the temporal period represented. Mancos Black-on-white dates from about A.D. 950 to A.D. 1150, and McElmo Black-on-white dates from A.D. 1100 to A.D. 1300.

Data concerning the ceramic types recovered from sites 5MT3777 and 5MT3778 are presented in Table 1. Types initially placed into the Mesa Verde and Indeterminate culture categories (classified into Indeterminate because of the absence of spatially distinctive temper), were grouped together for the present comparison.

The assemblages observed can be compared to similar assemblages from dated contexts in other sites in the general area (Hallisi 1979; Reed 1979; Martin 1936; Swannack 1969; Franklin 1980).

The small size of the ceramic assemblage recovered from site 5MT3777 makes the assignment of a specific date difficult. In fact the only formal type recovered from this site is Mancos Black-on-white. Still, based on the presence of various types, and on the absence of others, a date of occupation from about A.D. 1000 to A.D. 1150 may be postulated.

As a larger ceramic sample was recovered from Casa de Sueños, it is easier to assign a specific date to this site. Several criteria, including the presence of Dolores Corrugated as the sole corrugated type, and the joint presence of McElmo and Mancos Black-on-white (but with McElmo present in significantly higher proportions) as well as

the associated grouped types indicate this site was not occupied until about A.D. 1150. The lack of Mesa Verde Black-on-white and Mesa Verde Corrugated also indicate this site was not occupied past A.D. 1200. Thus, the maximum period of occupation at Casa de Sueños is A.D. 1125 to A.D. 1200; the more likely period of occupation is A.D. 1150 to A.D. 1200. Casa de Sueños may be contemporaneous with other nearby sites, especially the second occupation of the Escalante Site. It may be contemporaneous to a number of sites investigated during the mitigation activities of the Dolores Archaeological Program occupied from A.D. 1100 to A.D. 1250.

The identification of ceramics, which may have been produced in other areas, allows for the determination of the nature of exchange relationships with these areas. Nonlocal ceramics are primarily identified on the presence of particular ceramic resource groups (especially temper) known not to have been locally utilized. Such criteria allows for the identification, both of ceramics produced in other regions and those produced in some other areas of the Mesa Verde Region (Wilson and Blinman 1984). None of the ceramics analyzed can be definitely said to have been produced outside the Mesa Verde Region. A number of temper groups are represented (Table 2). The majority of the ceramics recovered from both sites contains a crushed igneous temper (andesite-diorite), either by itself or with other tempering material such as crushed sherd. This temper was available and utilized locally, and thus, is used to place ceramics into a local manufacturing tract, although such tempers were also utilized in many

areas throughout the Mesa Verde Region. The area of origin of ceramics not containing a distinctive lithic tempering material cannot be determined. Thus, sherds containing an indeterminate temper are placed into an indeterminate manufacturing tract. As sherd temper was probably utilized locally during the time period the two sites was occupied, it is possible that these ceramics were locally produced or produced in nearby areas.

San Juan crushed represents a crushed igneous temper which may have been utilized within other areas of the Mesa Verde Region, although temper identified as San Juan crushed may also sometimes represent material in the range of crushed andesite-diorite. Quartz sand may be thought to indicate ceramics produced within the Kayentan or Cibola region, although this temper may have been occasionally utilized in other areas within the Mesa Verde Region. This temper does, however, indicate nonlocal ceramics. Conglomerate represents a poorly sorted crushed sandstone, and is indicative of ceramics originating in areas immediately to the west in beanfield and canyon country. It does appear that the great majority of ceramics recovered from both sites could have been locally produced. The major difference noted between different wares is that a significantly higher proportion of whitewares contains crushed sherd temper. The reasons are the result of differences in the technological requirements of the two ware groups.

Table 2. Temper types present at sites 5MT3777 and 5MT3778

Temper	5MT3777						5MT5778					
	Graywares		Whitewares		Total		Graywares		Whitewares		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Indeterminate			1	3.3	1	1.2	4	0.4	7	3.6	11	1.0
Andesite-diorite	32	59.2	1	3.3	33	39.3	596	69.6	7	3.6	603	57.4
Sherd & andesite-diorite	4	7.4	19	63.3	23	27.4	81	9.4	90	46.3	171	16.3
Sherd & quartz			2	6.6	2	2.4			1	0.5	1	0.1
Sherd & quartz sandstone			2	6.6	2	2.4			1	0.5	1	0.1
San Juan crushed	10	18.5			10	11.9	67	7.8	1	0.5	68	6.5
Sherd & San Juan							1	0.1	4	2.0	5	0.5
Conglomerate	7	12.9			7	8.3	5	0.5			5	0.5
Dakota sandstone							1	0.1			1	0.1
Sherd			5	16.6	5	5.9	99	11.5	71	36.5	170	16.2
Sherd & conglomerate							1	0.1	1	0.5	2	0.2
Sandstone & andesite-diorite	1	1.8	2	6.6	3	3.5	1	0.1	1	0.5	2	0.2
Sherd, sandstone, andesite-diorite									10	5.1	10	1.0
Totals	54		30		84		856		194		1050	



Ware and vessel form classes were compared to provide functional data. Table 3 indicates ware and form classes recovered from sites 5MT3777 and 5MT3778. The great majority of ceramics from both sites is represented by grayware jars, probably indicating storage or cooking activities. Whiteware jars and bowls are represented in much smaller but significant proportions. A single whiteware dipper sherd was recovered from 5MT3778. Of the eight reconstructable vessels recovered, six are corrugated grayware jars and two are whiteware bowls.

Post-firing modifications were also examined. Two sherds (one whiteware and one grayware) contain repair holes. Three sherds, all whitewares, also exhibit abraded edges.

Table 3. Function types present at sites 5MT3777 and 5MT3778

	Ware Forms					Total
	Grayware jar	Whiteware jar	Whiteware bowl	Whiteware dipper	Other	
5MT3777	54	14	16			84
Percent	64.3	16.7	19.0			
5MT3778	856	70	120	1	3	1,050
Percent	81.5	6.7	11.4	0.1	0.3	
Total	910	84	136	1	3	1,134
	80.2	7.4	12.0	0.1	0.3	

APPENDIX B

PLANT REMAINS RECOVERED FROM 5MT3778, CASA DE SUEÑOS

by

Beth A. Griffitts

## APPENDIX B

### PLANT REMAINS RECOVERED FROM 5MT3778, CASA DE SUEÑOS

Botanical artifacts can contribute information for more complete understanding of the former occupants of an archaeological site. At Casa de Suenos, both flotation samples (bulk soil) and vegetal samples (plant material recognized in the field and sent in as a separate sample) were taken. All botanical samples were analyzed at the Dolores Archaeological Program (DAP) laboratory using comparative materials assembled from the DAP area.

#### Methodology

Bulk soil samples were processed using a modification of the procedure described by Bohrer and Adams (1977). All samples were weighed and the columns measured. Each sample was then poured into a container, water added, and the material floating to the top was poured off into a double-knit, fabric-lined geological screen. This was repeated until nothing more floated. The remaining heavy materials at the bottom of the container were gently washed in a 500-micrometer geological screen to remove silt, and dried on a newspaper.

When dried, both heavy and light fractions were examined through a binocular microscope, all plant materials were identified, and quantity and condition of each recorded. The analyzed samples and records will be stored at the Anasazi Heritage Center, near Dolores, Colorado.

## Discussion

Noncharred and charred woods and seeds were recovered. When non-charred wood comes from a provenience such as a posthole, it is obvious that the occupants of the site probably had something to do with its presence there. Noncharred seeds and fruits can get into a site in various ways. None of the noncharred material appeared to be recent contamination, blowing in during excavation or processing. No rodent droppings and very few parts of insects were found in the samples. The noncharred seeds and fruits did not show signs of predation as seeds in animal caches usually do; contamination by rodents and insects appears to be minimal.

Charred wood and seeds probably reflect human activity of some sort although it might not have been intentional manipulation of seeds for cooking, etc. Weed seeds could have blown or have been tracked into a structure, then swept into a hearth and accidentally burned. Seeds tracked into a structure also burn if the structure burns.

Most of the fruits and seeds recovered had uses recorded in ethnographic literature. The only seed recovered that was from a plant not used as food by many Americans in the Southwest is the globe mallow seed recovered from Sipapu 2, Pitstructure 1. This seed was not charred but came from a sipapu sealed under a floor, and might have been introduced before the sipapu was sealed by the other floor.

The purslane, goosefoot, and ground cherry seeds recovered at this site are not only from edible plants, but also represent plants encouraged by disturbing their environments. Thus, the area around

the site was enriched by the disturbance of the occupancy, which caused more edible weedy plants to grow in the area. These plants, growing near the site, would also have a good chance of accidental introduction into the site by wind or water. They are also among the earlier plants to colonize after an area is abandoned.

The contents of a pot (Bulk Soil Samples 1 and 2) contained charred Dicotyledoneae seeds from a broad-leaf or deciduous plant which could not be identified further. They might have been placed in the pot; no concentration of these seeds occurred elsewhere.

Recovery of a few fragments of corn cobs (cupules) showed that these people were using (and probably growing) corn. Beans (Phaseolus sp.) and squash (Cucurbita sp.) were not recovered, but this may be due to poor preservation conditions for squash and bean remains rather than to their not being grown in the area. Beans and squash were recovered from the nearby DAP area although not as frequently as corn.

### Results

Results of analysis are given in two lists; the first gives remains found in bulk soil samples, and the second gives remains from vegetal samples. These lists are arranged by structure and feature number. Common names were used first to facilitate use by non-botanists. Scientific names are given in parentheses. All plant remains are listed with their quantity and condition.

REFERENCES CITED

- Bohrer, Vorsila L. and Karen R. Adams  
1977 Ethnobotanical techniques and approaches at Salmon Ruin, New Mexico. Eastern New Mexico University, Contributions in Anthropology 8(1), Portales.

PLANT REMAINS RECOVERED FROM BULK SOIL SAMPLES, BY PROVENIENCE

CH - Charred  
NCH - Noncharred

PCH - Partly charred  
BS - Bulk Soil Sample

SURFACE STRUCTURE 1

Feature 5 - Hearth

FS 15, BS 4

Wood

Pine wood (Pinus sp.)

<.1 gm CH

Indeterminate bark

<.1 gm CH

Seeds/fruit

Goosefoot fruits (Chenopodium sp.)

1 CH

Indeterminate seeds

2 CH

Cultigens

corn cupule (cob part) (Zea mays)

1 CH

Feature 6 - Posthole

FS 16, BS 3

Wood

Pine wood (Pinus sp.)

<.1 gm CH

Rose family wood (Rosaceae)

<.1 gm CH

Conifer wood (Gymnospermae)

<.1 gm NCH

Seeds/fruit

Goosefoot fruit (Chenopodium sp.)

11 CH

PITSTRUCTURE 1

Feature 9 - Central Hearth

FS 21, BS 11

Wood

Pine wood (Pinus sp.)

<.1 gm CH

Sagebrush or rabbitbrush wood

(Artemisia sp./Chrysothamnus sp.)

<.1 gm CH

Cottonwood wood (Populus sp.)

<.3 gm CH

Seeds/fruits

Goosefoot fruits (Chenopodium sp.)

24 CH

Sunflower fruit (Helianthus sp.)

1 CH

Ground cherry seeds, CH (Physalis sp.)

2 CH

Cheno-ams\* (Chenopodium sp. or Amaranthus sp.)

11 CH

Indeterminate seeds

14 NCH

Other

Deciduous leaves (Dicotyledoneae)

2 NCH

\*Cheno-ams refers to a category of seeds/fruits difficult to distinguish between; the category consists of goosefoot (Chenopodium sp.) and pigweed (Amaranthus sp.).

Feature 10 - Unburned Pit

FS 22, BS 6

Wood		
Conifer wood ( <i>Gymnospermae</i> )	<.1 gm	CH
	<.1 gm	NCH
Rose family wood ( <i>Rosaceae</i> )	<.1 gm	CH
Seeds/fruits		
Goosefoot fruits ( <i>Chenopodium</i> sp.)	7	NCH
Other		
Pinyon needle fragment ( <i>Pinus edulis</i> )	1	CH

Feature 11 - Unburned Pit

FS 23, BS 7

Wood		
Pine wood ( <i>Pinus</i> sp.)	<.1 gm	CH
Sagebrush or rabbitbrush wood		
( <i>Artemisia</i> sp./ <i>Chrysothamnus</i> sp.)	<.1 gm	CH
Seeds/fruits		
Goosefoot fruits ( <i>Chenopodium</i> sp.)	3	NCH

Feature 15 - Wall Niche

FS 27, BS 8

Wood		
Pine wood ( <i>Pinus</i> sp.)	<.1 gm	NCH
Conifer wood ( <i>Gymnospermae</i> )	<.1 gm	CH
Rose family wood, CH ( <i>Rosaceae</i> )	<.1 gm	CH
Seeds/fruits		
Goosefoot fruits ( <i>Chenopodium</i> sp.)	6	NCH
Purslane seeds ( <i>Portulaca</i> sp.)	3	NCH
Indeterminate seeds	1	CH

Feature 17 - Ash Pit

FS 29, BS 9

Wood		
Pinyon wood ( <i>Pinus edulis</i> )	<.2 gm	CH
Conifer wood ( <i>Gymnospermae</i> )	<.1 gm	CH
Mountain mahogany wood ( <i>Cercocarpus montanus</i> )	<.1 gm	CH
Rose family wood ( <i>Rosaceae</i> )	<.1 gm	CH
Cottonwood wood ( <i>Populus</i> sp.)	<.1 gm	CH
Indeterminate bark	<.1 gm	CH
Seeds/fruits		
Cheno-ams ( <i>Chenopodium</i> sp. or <i>Amaranthus</i> sp.)	5	NCH
Ground cherry seeds ( <i>Physalis</i> sp.)	6	NCH
Indeterminate seeds	1	CH
Cultigens		
Corn cupules	8	CH



Feature 17 - Ash Pit

FS 30, BS 10

Wood		
Juniper wood ( <u>Juniperus</u> sp.)	<.3 gm	CH
Sagebrush or rabbitbrush wood		
( <u>Artemisia</u> sp./ <u>Chrysothamnus</u> sp.)	<.1 gm	CH
Gambel's oak wood ( <u>Quercus gambelii</u> )	<.1 gm	CH
Rose family wood (Rosaceae)	<.1 gm	CH
Cottonwood wood ( <u>Populus</u> sp.)	<.1 gm	CH
Seeds/fruits		
Goosefoot fruit ( <u>Chenopodium</u> sp.)	2	CH
Ground cherry seeds ( <u>Physalis</u> sp.)	42	NCH
Cultigens		
corn cupules ( <u>Zea mays</u> )	8	CH
Other		
Pinon needle ( <u>Pinus edulis</u> )	1	CH

Feature 19 - Sipapu

FS 32, BS 12

Wood		
Juniper wood ( <u>Juniperus</u> sp.)	<.1 gm	CH
Pine wood ( <u>Pinus</u> sp.)	<.1 gm	CH
Seeds/fruits		
Goosefoot fruit ( <u>Chenopodium</u> sp.)	1	CH
Globe mallow seed ( <u>Sphaeralcea</u> sp.)	1	NCH
Other		
Pinon needle fragment ( <u>Pinus edulis</u> )	1	CH

Feature 20 - Sipapu 2

FS 34, BS 13

Wood		
Conifer wood, CH (Gymnospermae)	<.1 gm	CH
Cottonwood wood, CH ( <u>Populus</u> sp.)	<.1 gm	CH
Rose family wood, CH (Rosaceae)	<.1 gm	CH
Seeds/fruits		
Goosefoot fruits ( <u>Chenopodium</u> sp.)	6	NCH
Purslane seeds ( <u>Portulaca</u> sp.)	3	NCH
Cultigens		
Corn cupule fragments ( <u>Zea mays</u> )	3	CH

Pot Interior

Level 2, FS 7, BS 1

Wood

Pine wood ( <u>Pinus</u> sp.)	<.1 gm	CH
Rose family wood (Rosaceae)	<.1 gm	CH
Indeterminate bark	<.1 gm	CH

Seeds/fruits

Cheno-ams ( <u>Chenopodium</u> sp. or <u>Amaranthus</u> sp.)	1	NCH
Deciduous seeds (Dicotyledoneae)	2	NCH
Indeterminate seed fragment	1	CH

Pot Interior

FS 7, BS 2

Wood

Pine wood ( <u>Pinus</u> sp.)	<.1 gm	CH
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Seeds/fruits

Goosefoot fruits ( <u>Chenopodium</u> sp.)	27	CH
	3	NCH
Cheno-ams ( <u>Chenopodium</u> sp. or <u>Amaranthus</u> sp.)	14	CH
Ground cherry seeds ( <u>Physalis</u> sp.)	2	CH
Deciduous seeds (Dicotyledoneae)	13	CH
Indeterminate seeds	1	CH
	1	NCH

Upper control

Level 2, FS 7, BS 5

Wood

Sagebrush or rabbitbrush wood ( <u>Artemisia</u> sp./ <u>Chrysothamnus</u> sp.)	<.1 gm	CH
Rose family wood (Rosaceae)	<.1 gm	CH

Seeds/fruits

Goosefoot fruits ( <u>Chenopodium</u> sp.)	2	NCH
Purslane seed ( <u>Portulaca</u> sp.)	1	NCH

Other

Pinyon needle fragment ( <u>Pinus</u> <u>edulis</u> )	1	NCH
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PLANT REMAINS RECOVERED FROM VEGETAL SAMPLES, BY PROVENIENCE

CH - Charred  
NCH - Noncharred

PCH - Partly charred  
BS - Bulk Soil Sample

SURFACE STRUCTURE 1

Surface 1, Feature 6, FS 7 - Posthole

Juniper wood ( <u>Juniperus</u> sp.)	3.8 gm	CH
	1.5 gm	NCH
Conifer wood (Gymnospermae)	1.0 gm	NCH

Surface 1, Feature 7, FS 17 - Posthole

Cottonwood wood ( <u>Populus</u> sp.)	2.0 gm	NCH
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PITSTRUCTURE 1

Level 2, FS 7 - Construction Material

Juniper wood ( <u>Juniperus</u> sp.)	3259.5 gm	PCH
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Surface 1, Feature 2, FS 11 - Wall Recess

Juniper wood ( <u>Juniperus</u> sp.)	13.4	NCH
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